

3-D Imaging Past & Present

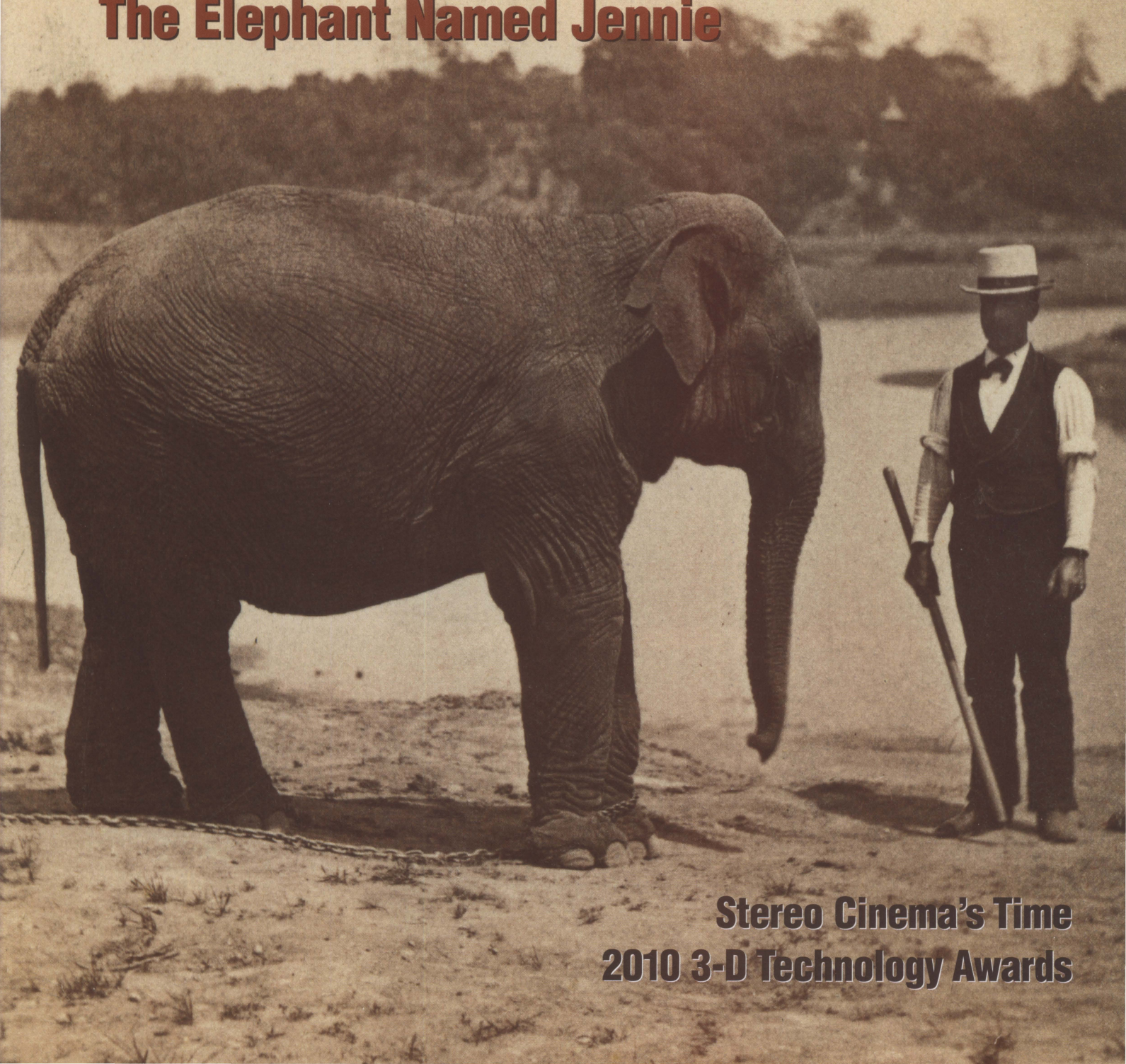
# STEREO WORLD

January/February 2011  
Volume 36, Number 4



A Publication of  
National  
Stereoscopic  
Association, Inc.

## The Elephant Named Jennie



Stereo Cinema's Time  
2010 3-D Technology Awards



# '50s Flavored Finds

A taste of the late '40s through the early '60s found in amateur stereo slides

by Mark Willke

## Figure Studies at the Fair

This issue's images were provided by Armand Meyer of New Mexico. He was the photographer, shooting Kodachrome with a Kodak stereo camera at the Los Angeles County Fair on September 17, 1960.

Armand explained that there was always a photography section at the fair, but this was the first time he recalls that they had live models for photographers to shoot. "My dad encouraged me to take a few photos of them," he says. "I told him, 'I don't think my wife would like that,' but I did it anyway. And I am glad I did." He says he still owns the Kodak stereo camera, which remains fully functioning and usable.

I'm curious if the stools that the models are sitting on were the latest in 1960s patio furniture, or if they were just some baskets turned upside-down for a new use! 📷



This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the "golden age" of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century.

If you've found a classic '50s-era image that you would like to share through this column, please send the actual slide or a high-resolution side-by-side scan as a jpeg, tiff or photoshop file to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206. You can also email the digital file to [stwrld@teleport.com](mailto:stwrld@teleport.com). If the subject, date, location, photographer or other details about your image are known, please include that information as well.

As space allows, we will select a couple of images to reproduce in each issue. This is not a contest—just a place to share and enjoy. Slides will be returned within 6 to 14 weeks, and while we'll treat your slide as carefully as our own, Stereo World and the NSA assume no responsibility for its safety.



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A Publication of  
National Stereoscopic Association, Inc.



Volume 36, Number 4  
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## Front Cover:

The Philadelphia Zoo's first elephant, "Mollie," as stereographed by Schreiber in 1875. Her name was soon changed to "Jennie," a choice on which perhaps turns the tale in Richard Ryder's feature article "The Elephant That Was Winston Churchill's Mother?" in this issue.

## Back Cover:

Abraham Lincoln in a stereo image from the Library of Congress, one of his last studio portraits taken before his second inauguration in early February, 1865. His short haircut was apparently in preparation for a plaster life mask made February 11. The anaglyph is one of several such portraits in the expansive new book *Lincoln in 3-D* by Bob Zeller and John J. Richter, published in recognition of the 150th anniversary of the Civil War and reviewed in this issue.

The National Stereoscopic Association is a non-profit organization whose goals are: to promote research, collection and use of vintage and contemporary stereoviews, stereo cameras and equipment, and related materials; to promote the practice of stereo photography; to encourage the use of stereoscopy in the fields of visual arts and technology; to foster the appreciation of the stereograph as a visual historical record.

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# EDITOR'S VIEW

## Comments and Observations

John Dennis

### 3-Deja Vu

If all you do is read the new product announcements in electronics magazines or blogs, you could be forgiven for assuming that the world is about to be flooded with 3-D cameras of every price and description. In reality, many of course are never marketed or never exported. Others are in fact identical to cameras (or accessories like autostereoscopic viewing screens) introduced a year or so ago but promoted as new products sporting a few variations in detail and a new logo on the nameplate.

This is clearly the case with the Aiptek 3-D camera/camcorder (SW Vol. 36 No. 2 page 37) which morphed into the ViewSonic 3-D Camcorder covered in NewViews in this issue. As we were about to go to press we learned of another "new" camera announcement, this time from a firm that purchased the famous German Rollei camera name and placed it on their "Power Flex 3D" point-and-shoot digital. The new product is identical to the earlier 3DInlife SDC820 "Easy 3D" camera, including the 50mm stereo base and bundled seven-inch autostereoscopic photo frame.

While we have yet to see either still or video produced by the



Rollei camera, there has been serious criticism of the low resolution files from the 3DInlife Easy 3D and of the coarse 3-D screen featured on the back of that camera. We can, at least, applaud the almost normal lens separation of these apparent product clones, an encouraging move away from the more miserly bases of some recent 3-D cameras from other manufacturers. Plus, the presence of a flash shows that stills aren't just an afterthought in the enthusiasm to compete in the mini camcorder market. See [www.rcp-technik.com/typo3/index.php?id=rollei-home&L=0](http://www.rcp-technik.com/typo3/index.php?id=rollei-home&L=0).

### Toying With Stereo

Some have commented that cameras like the Aiptek and Easy 3D are "little more than toys", but in fact that's a separate and very serious market for companies

active in that field. Digital cameras marketed to children as young as five involve big investments in design and durability research, if not image resolution or color

(Continued on next page)

.....  
The Tomy 3D Shot Cam with sample pair prints and folding viewer.



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# LETTERS

## Reader's Comments and Questions

### Charlie Chaplin 3-D Sequences

Recently, someone on the internet questioned if a street scene filmed at the 1928 premier of Charlie Chaplin's *The Circus* featured a time traveling woman talking on a cell phone. The film clip is on the supplements disc of the

mk2 release of *The Circus*, and has since gone viral on the internet. Of much more relevance to 3-D enthusiasts though is that on the same disc is a clip called "3D test footage" by Roland Totheroh which shows a clip of a few fellows hamming it up for the camera. Totheroh was Chaplin's lead cameraman from 1916 through 1936 and apparently had the time on his hands to experiment with 3-D. The Chaplin studios were notorious of idle days while Chaplin worked on scenarios. It appears that Totheroh overlaid the right and left films to check for synchronicity which accounts for the blurring in the sequence. The end of the clip switches to a "wobble" format. How his 3-D film was intended to be viewed in a theater in the 1920s remains a mystery.

Even more tantalizing is the clip simply labeled "Camera A, Camera B". Chaplin had the foresight to have all of his movies shot with side-by-side cameras so as to create two original negatives for domestic and foreign release. While this affords an exaggerated base line of about a meter, taking the duplicate film sequences and showing them

side-by-side gives a hyperstereo view of the scene. In this case, it is a short sequence that was edited from the film. It is not labeled as 3-D on the disc, however when viewed in cross eye you can actually see a hyperstereo film clip of Charlie Chaplin from 1926! These silent movie cameras were hand cranked, thus it is out of sync in several spots, but what an unexpected treat!

Going back to the 3-D test footage sequence begs the question of how Roland Totheroh perfectly synchronized two hand cranked cameras. A mysterious camera set-up that we may never see. And, in my opinion, more tantalizing a question than a time traveling cell phone user.

So, after reading Ray Zone's "Transformative Cinema" article that mentions the lost 3-D footage from Abel Gance's 1927 feature *Napoleon*, I am pleased to announce that some 3-D sequences from 1926 actually *do* exist, one intended, and another unintended, and both on the same DVD.

Carl Wilson  
Menifee, CA

### Editor's View

(Continued from previous page)

quality. Now the Tomy company has announced that the "3D Shot Cam" will be introduced in Japan next spring, aimed at kids 12 and older. It will have an SD card slot (8GB max.) and will come with two folding viewers for small pairs printed from the files produced. Tomy expects to sell about 50,000 cameras a year at \$70 each in Japan, with no word yet about international distribution. Maybe a rumor of potential "Junior 3-D" competition from Fisher-Price would spur them on.

### Correction

On page 38 of SW Vol. 36 No. 3, one of Bob Venezia's recent stereos is mentioned as having been awarded "Stereo Photo of the Year" by the PSA. He has informed us that the award was in fact for First Place in the Electronic section of the Stereo Photo of the Year competition.

### Additions to the checklist of C.L. Pond views, SW Vol.36 No. 2, page 26

- 673. Glacier Mountain Canon, from Alpine Trail, Yo Semite Valley, California.
- 675. Also published by no maker as No. 469.
- 711. Mt. Hoffman, Sierra Nevada Mts. from Cloud's Rest, Yo Semite Valley, California.
- 747. Chimney [sic] Rock, U. P. R. R. Weber Valley, Utah, courtesy of Bob Schreiber.
- 765. Yosemite Falls, 2634 feet high-Instantaneous view, Yo Semite Valley, California.

### GONE MADDD

by AARON WARNER  
3-D by Ray Zone



"WHAT'S SO GREAT ABOUT 3-D MOVIES THAT LOOK SO REAL?! I GO TO THE MOVIES TO ESCAPE REALITY!"



"WHAT'S SO GREAT ABOUT 3-D MOVIES THAT LOOK SO REAL?! I GO TO THE MOVIES TO ESCAPE REALITY!"

www.cartoonistforhire.com  
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# Chris Condon's Deep Legacy

3-D film pioneer Chris Condon died at age 87 on December 19 in Encino, CA., of complications from a stroke. He had just received the first Lifetime Achievement Award from the International 3D Society in October, 2010. Too ill to attend, his award was delivered to him in the hospital where a video of the ceremony was played for him. (See "NewViews" in this issue.) Below are two excerpts covering Chris Condon's contributions to stereoscopic cinema from a forthcoming book by 3-D film historian Ray Zone.

## Chris Condon and StereoVision

After *Flesh for Frankenstein*, AKA *Andy Warhol's Frankenstein* had been photographed with Robert Bernier's SpaceVision, the decision was made in 1974 to distribute the film in 3-D using Chris Condon's StereoVision projection optics in the theaters. The contract kept the StereoVision company alive in the wake of its staggering success with *The Stewardesses* (1969) and the ill-advised decision by Condon and his partner Allan Silliphant to invest their windfall by starting a commuter airline as a subdivision of the StereoVision company.

Like Bernier, Condon had invented and patented a complete system for single-strip 3-D film which included both a stereo attachment for cameras and projection optics for the cinema. As much as Bernier, Condon was a champion of single-strip 3-D. His work was highly influential in dri-

ving the 1980s boom of single-strip 3-D films. Condon had developed two separate single-strip 3-D formats for StereoVision with both an over-under widescreen configuration and a side-by-side anamorphically squeezed format. It was the side-by-side configuration that Condon had used to photograph and project *The Stewardesses* in 1969. When *The Stewardesses* opened in two of investor/distributor Lou Sher's Art Circuit theaters in 1969, one in Hollywood and one in San Francisco, the box office results surprised everybody.

"When we showed *The Stewardesses*," recalled Condon, "we had some control over the projection. Most people think that when you make a good film in 3-D, you're going to make a lot of money. But it has to be a film with stereoscopic elements that are used as part of the entertainment."

From 1969 to 1982, *The Stewardesses* had over 400 playdates in North America. "We went to every single theater that played it in the United States and Canada," said Condon. "I went personally and set it up."

As a designer of optics, Condon's patented "Film Projection Lens System for 3-D Movies," proved highly pragmatic and found great use in theatrical exhibition. In a special licensing arrangement with Warner Bros., StereoVision optically printed *House of Wax* in a side-by-side single strip 3-D format and gave it a 3-D rerelease in both

35mm and 70mm in 1970. In 1975 Condon again provided stereo projection lenses and consultation for a SpaceVision 3-D film with a limited rerelease of Oboler's *The Bubble*, retitled *Fantastic Invasion of Planet Earth*.

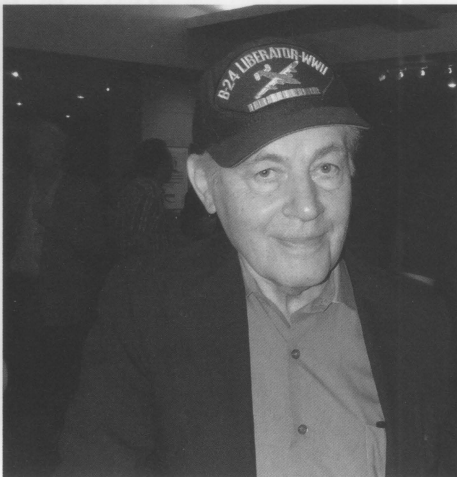
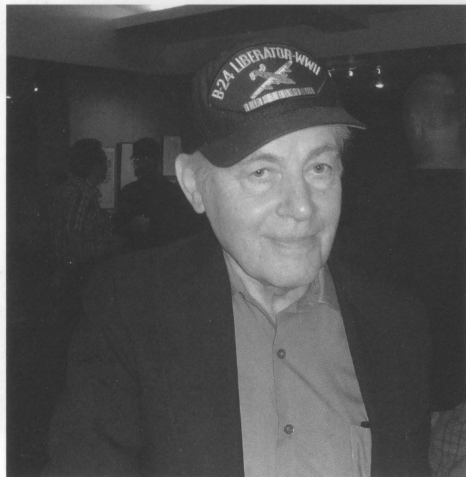
The StereoVision single-strip 35mm 3-D lens attachment was granted a U.S. patent in 1984 but prior to that it had been used on numerous feature length 3-D movies including Charles Band's *Parasite* (1982) and *Metalstorm* (1983), *Jaws 3-D* (1983) from Universal Pictures as well as several of independent producer Earl Owensby's features including *Rottweiler* (1981), *Chain Gang* (1984), *Hot Heir* (1984) and *Hyperspace* (1984). In 1984, StereoVision single-strip 3-D was also used to photograph the first stereoscopic film in India with *My Dear Kuttichaten*.

Chris Condon served as a lifelong champion of stereoscopic cinema in continually stressing the importance of quality in 3-D production and exhibition. A 1982 StereoVision manual written for clients by Condon, with the assistance of Robert Caspari, Paul Kenworthy and John Rupkalvis, was titled *Principles of Quality 3D Motion Picture Projection*. In this manual Condon wrote:

Three dimensional motion pictures have the potential of being the most fascinating, the most realistic and the most entertaining of all the visual media. These marvelous films stimulate total visual perception. However, any errors in the highly specialized art of 3-D cinematography and any deviation from the well-known requirements of good 3-D projection can result in a visually mediocre show. Instead of being a wonderful entertainment experience, inexperienced 3-D projection can cause viewing to be annoying and visually uncomfortable.

To assist stereoscopic cinematographers in the use of the StereoVision 3-D lens for photography, Condon, with the assistance of John Rupkalvis, in 1985 also wrote a *Manual of Stereoscopic Cinematography*. Illustrated with line drawings by Tony Alderson, this manual was created to be a useful field handbook for 3-D cinematogra-

Chris Condon, stereographed by Susan Pinsky, Sept. 20, 2009.





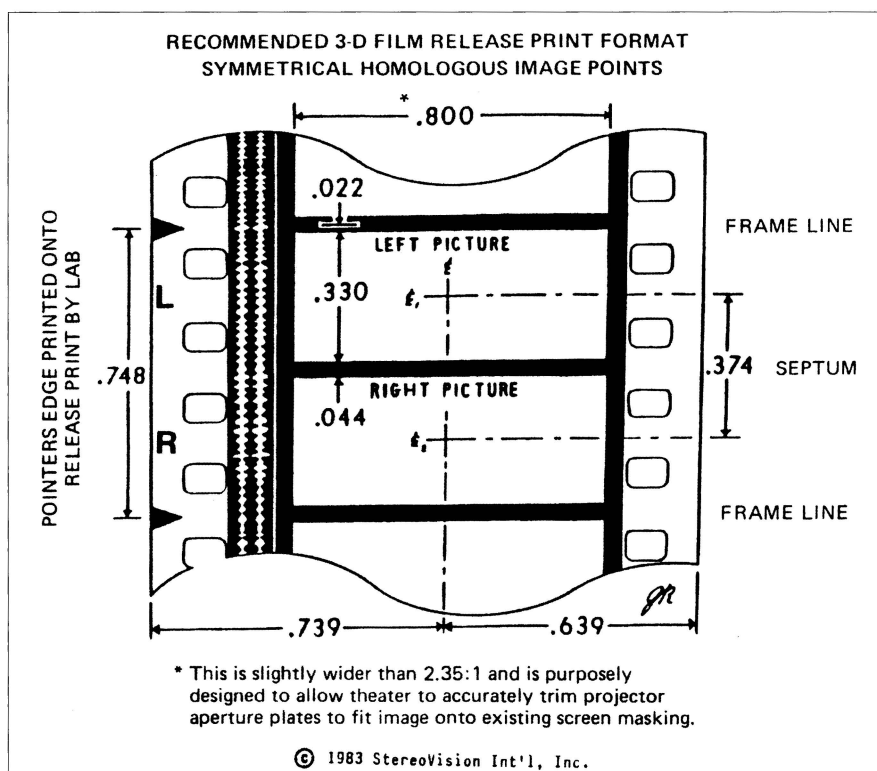
phers. All of the technical specifications for installation and use of StereoVision single-strip 3-D lenses, as well as basic fundamentals of stereoscopic cinematography, were discussed with great clarity.

John Rupkalvis is a 30-year veteran of stereoscopic cinematography who often worked as a consultant with Chris Condon on numerous single-strip 3-D motion pictures including *Metalstorm*. Rupkalvis designed the StereoScope single-strip 3-D lens for photography of miniatures which was very useful during the photography of *Metalstorm* and was offered as a component of the StereoVision production package. As a part of his 1980s promotional literature Rupkalvis prepared a useful comparison chart that identified technical specifications of the many single-strip 3-D camera systems available at the time.

StereoVision frequently prepared 3-D Questionnaires and polled patrons exiting theaters about 3-D movies. *House of Wax* director Andre de Toth, with whom Condon became a good friend, reported that on September 6, 1980, StereoVision conducted a survey of 200 patrons at the Egyptian Theater in Hollywood. At the theater, 186 moviegoers (93% of those polled) said they wanted to see a "good" 3-D picture. 143 (72%) said they had never seen a 3-D movie and 116 (58%) said they would be greatly influenced to see a good film if it was also in 3-D.

For de Toth, as well as Condon, quality of 3-D presentation was paramount. "Projectionists have to realize that their carelessness or negligence can turn entertainment into torture," wrote de Toth. "Their contribution to the success of a 3-D movie is as important as that of those who shot it."

There were two fundamental limitations of the single strip 35mm 3-D film format. The first was uneven illumination of the two frame pairs in projection. The second was equally problematic with differences in center spacings of the two frame pairs that were asymmetrical. In designing his Stereoflex 3-D projection lens, Condon took this deficiency into account so that his projection lens could be compatible with single



Chris Condon's "over/under" StereoVision format.

strip 3-D films photographed with technology other than that of StereoVision.

### **The Stewardesses Takes Flight**

"Huge Success Scored with New 3-D Process" read a headline in a January 1970 issue of *Boxoffice* magazine. The article by Syd Cassyd discussed a 3-D film that had just opened in only two theaters and was bringing in substantial box-office dollars. "An old cliché about beating a path to the door when a better mousetrap comes along has been dragged out of the closet, shined up and hung in a prominent spot on the wall of Sherpix and Magnavision, joint owners of their first theatrical output of a modernized 3-D process which has already grossed \$350,000 in two small theaters," wrote Cassyd.

The film was *The Stewardesses* and it was directed by Allan Silphiant and shot by Chris Condon, using the nom de camera Christopher Bell, in his side-by-side single-strip 35mm 3-D process which was named "Magnavision" at the time. Condon's side-by-side Magnavision 3-D format optically "squeezed" the two left and right frames, usually 2:1, so that they could be

placed together in a single 4-perf 35mm frame producing an "Academy" aspect ratio of 1.33 to 1. Playing initially in two of Lou Sher's Fine Art circuit houses in San Francisco and Hollywood, *The Stewardesses* originally cost \$14,000 to produce. More money was spent by Lou Sher incrementally to shoot additional, increasingly explicit, segments for *The Stewardesses*. With a \$5 ticket price, *The Stewardesses* then played as a "multiple" in theaters in various road-show versions with different degrees of sexual explicitness. By the fall of 1971, *The Stewardesses* had grossed over \$11 million.

The side-by-side 3-D lens had been production-tested in 1968 when Condon led an experimental production entity known as Magnavision3D. The Magnavision3D crew was comprised of Condon as stereo cinematographer, assisted by Dan Symmes and Allan Silphiant as director/screenwriter. After a few weeks of satisfactory results, the group was in contact with Louis K. Sher, president of the 40-theatre Art Theatre Guild (ATG) circuit. Sher enlisted the Magnavision3D group to make a 3D movie to complement the Art Theatre Guild repertoire, which at that time

(Continued on page 35)



# Now is the Time

## Historical Perspectives on Stereo Cinema

by Ray Zone

*"The days are gone when it was enough to 'make cinema' in order to deserve well of the seventh art. While we wait until color or stereoscopy provisionally return its primacy to form and create a new cycle of aesthetic erosion, on the surface cinema has no longer anything to conquer."*

- Andre Bazin,  
"In Defense of Mixed Cinema"

Cinema has always reinvented itself. The "seventh art" has always been the most plastic of the visual arts, a protean engine for cultural invention, a myth continually refashioning itself with new technology. In the late 19th century, the cradle of the motion picture, development of the "ani-

mated photograph" or "living picture" was seen as only the first step towards a screen reality that would ultimately also include sound, color and the third dimension.

### I. Aesthetic Erosion








Stereoscopic cinema, articulation of motion pictures on the z-axis, has been a recurring discovery, periodically reinvented every few decades for over a century. 3-D narratives, continually "new," have struggled to emerge from novelty status in cinema, a kind of storytelling ghetto, for quite some time. This novelty status, each cycle, has consigned stereo cinema within a short period of time back into the cultural closet after every one of its reappearances.

Now, however, with the advent of digital 3-D production and exhibition, technical errors in stereo cinema can be eliminated. Digital imaging is fueling stereography in every form of visual display, from the mobile handheld and the worldwide Internet to theater screens and 3-D TV. But why would Andre Bazin, that cunningly articulate prophet of cinema (writing just after the 1950s 3-D movie boom), suggest that stereoscopy might create "a new cycle of aesthetic erosion"? What could he have meant by that?

Reviewing the history of cinema, it becomes apparent that a fundamental change in the narrative art of the motion picture takes place with each new advance of technology. An interim period of transition, however, is necessitated wherein the storytelling capabilities of the technological advance are explored, developed and put into practice. These innovations drive an expansion of cinematic vocabulary, new syntax for the narrative grammar. But this enlarged grammar is not instantaneous and has to be arrived at over time by artists working in the new medium. Unfortunately, the periodic reappearances of stereo cinema on the motion picture landscape have been so brief that there has been little opportunity for filmmakers to develop specific grammar for stereoscopic narrative. Until now, that is.

With the term "aesthetic erosion," Bazin may have been describing atrophy of prior modes that occur with new developments. Slapstick comedy, for example, inherent in the silent film, waned with the inauguration of sound as the fast-talking screwball comedies proliferated and reached an apotheosis in the 1930s and

### Impact of technological innovation in cinema

Technology	Major Intro.	Practical Impact	Artistic Impact
 Motion	1895	Required entirely new infrastructure to exhibit	Involved creation of new visual narrative techniques
 Sound	1927	Made both production and exhibition more complex and expensive	Shifted emphasis to dialog for storytelling
 Color	1935	Increased production costs, but did not affect exhibition	Extended palette for emotional expression
 Widescreen	1952	Increased both production and exhibition costs	Increased immersive nature of movie viewing experience
 3-D	1952	Imposed practical limitations during production and was difficult to exhibit properly	Wasn't sufficiently successful to significantly impact the nature of film narrative
 Digital Projection	2000	Requires initial investment, but is more reliable and simpler to use than film projection	Presents no obvious subjective difference to the viewer
 Digital 3-D Projection	2005	Requires initial investment, but is reliable and entails no special operator training	Increases immersive nature of viewing experience and expands emotional palette

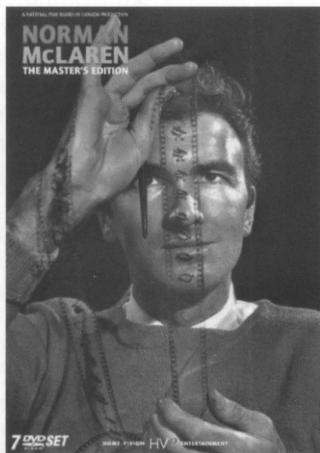
Illustrated table by David Kuntz and Ray Zone



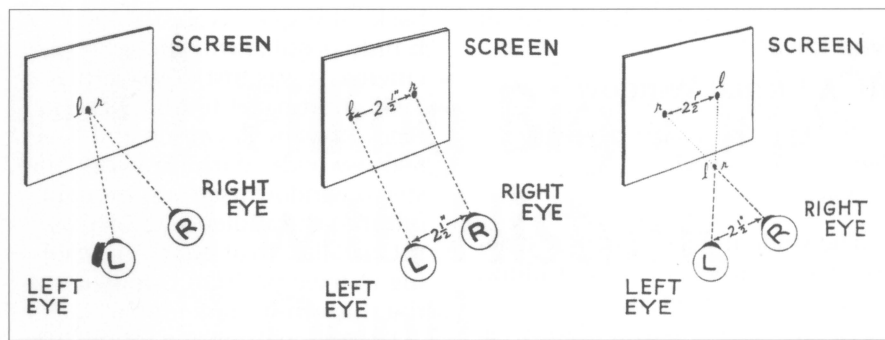
40s. A prior genre, in other words, will “erode” as a new genre, driven by underlying technology, is born. What new storytelling genres, one may ask, will stereo cinema give rise to?

Not surprisingly, Bazin gave consideration to this same question. He is certainly emphatic in underscoring the importance of the stereo image to the invention of motion pictures. In an essay titled “The Myth of Total Cinema,” Bazin suggests (after film historian P. Potonicee) that “it was not the discovery of photography but of stereoscopy, which came onto the market just slightly before the first attempts at animated photography in 1851, that opened the eyes of the researchers. Seeing people immobile in space, the photographers realized that what they needed was movement if their photographs were to become a picture of life and a faithful copy of nature.” It was stereography, we gradually learn, that drove the creation of cinema!

Ironically, as cinema outgrew its own novelty period (1895 to 1905) and developed visual grammar for narrative, the stereoscopic image went into a decline. Intermittent attempts at stereo cinema up to the 1950s largely presented stereographic images at the expense of narrative, foregrounding the visual effect to the detriment of the suspension of disbelief so integral to feature-length storytelling. As a result, stereo cinema for most of the 20th century consisted of novelty short films. In the dual-strip 3-D movies of 1952 to 1954 (with over 50 released) the tug-of-war between the narrative and stereoscopic spectacle is continually in evidence, with a few notable exceptions like *Inferno* (1953) and *Miss Sadie Thompson* (1953).



Norman McLaren on the boxed set of seven DVDs comprising the 2006 “Masters Edition” of his work, which reportedly includes about every foot of film he ever made *except* *Now is the Time* or *Around is Around*.



Three drawings by Norman McLaren depicting stereoscopic viewing conditions.

## II. Evolutionary Montage

An even crueler irony has been the fact that two-dimensional film making, like painting before it, adopted visual strategies for conveying depth on a flat canvas, further obviating any necessity to use real stereoscopic images in the emerging narrative grammar of cinema. These two-dimensional strategies include horizontal camera motion, movement of the camera on the z-axis and lighting techniques exploiting monocular depth cues such as atmosphere, haze and diminution of tone. Selective focus with narrow depth of field also came into common usage as a storytelling tool and a means of directing the filmgoer’s attention.

In a visionary essay titled “The Evolution of the Language of Cinema,” Bazin has discussed two-dimensional filmmakers who have used strategies for depth on a planar surface. These strategies diminished their use of “montage” or rapid intercutting, which had achieved its height in the silent film with D.W. Griffith’s *Intolerance* (1916) and *Broken Blossoms* (1919) and with the Soviet cinema in the 1920s. Montage had ultimately led to a standardized style of editing. When Orson Welles made *Citizen Kane* (1941) this fashion of editing was “challenged by the shot in depth,” observes Bazin. “Thanks to

the depth of field, whole scenes are covered in one take, the camera remaining motionless. Dramatic effects for which we had formerly relied on montage were created out of the movements of the actors within a fixed framework.”

Now, this is not to say that montage has no place in stereoscopic cinema. Bazin writes that “the sequence of shots ‘in depth’ of the contemporary director does not exclude the use of montage.” He also adds that “it would obviously be absurd to deny that montage has added considerably to the progress of film language,” but appends that “this has happened at the cost of other values, no less definitely cinematic.”

Besides Welles, Bazin cites the work of director Jean Renoir in using deep focus on films such as *La Règle du Jeu* (1939). “The more I learn about my trade,” Renoir is quoted as stating, “the more I incline to direction in depth relative to the screen.” Bazin adds that, in Renoir’s films, “the search after composition in depth is, in effect, a partial replacement of montage by frequent panning shots and entrances. It is based on a respect for the continuity of dramatic space and, of course, of its duration.”

These thoughts offer rich implications for the stereoscopic filmmaker at a time when cinema is reinventing itself on the z-axis. As the tools for production, post-production and exhibition of stereoscopic narratives become increasingly transparent and standardized in the motion picture industry, new genres and narrative modes will evolve. Technology is laying the groundwork for z-axis grammar and a new syntax that will be articulated in visual space, both



behind the screen and in the room with the audience.

### III. A Virtual Window

*"For me, a painting is a window, but a window on what?"*

- Andre Breton

The student of stereoscopic cinema may greatly benefit by readings in classic film criticism by observers such as Bazin, Manny Farber, James Agee and others. The break from the elder arts of painting, theater and the novel that cinema had to make in order to establish itself as the new seventh art, offers insights as to how stereo cinema might distinguish itself from two-dimensional film and declare its aesthetic primacy as a unique art form.

A fundamental concept of stereoscopic cinema is that of the "stereo window," in which the edges of the visual frame, particularly the vertical surround, occludes and "cuts off" what is behind the edge in the same way as a real window. Bazin finds a fundamental difference between a painting and a motion picture screen. Differentiating painting from film, Bazin makes "a more subtle argument that is never employed though it is the most important of all—space, as it applies to a painting, is radically destroyed by the screen." The function of the frame around a painting, he contends, is to "emphasize the difference between the microcosm of the picture and the macrocosm of the natural world" in which the painting lives.

The picture frame in a painting "offers a space the orientation of which is inwards, a contemplative area opening solely onto the interior of the painting." With the cinema, in contrast, "what the screen shows us seems to be part of something prolonged indefinitely into the universe. A frame is centripetal, the screen centrifugal."

The word "centrifugal" certainly describes the "floating window," a relatively recent development in stereo cinema. Digital intermediates and 3-D digital projection have facilitated this new and exciting parameter of stereoscopic narrative. The technique of bringing one or more sides of the motion picture frame itself out into (or

back into) space is something that is only possible with stereoscopic cinema. It was first done with a 1952 short ballet film in 3-D, *The Black Swan* by Raymond and Nigel Spottiswoode. With this work, the stereo window itself was brought out into the audience to increase the parallax "real estate," remaining in fixed position throughout the thirteen-minute film.

Even though no motion picture critics mentioned the fact, the digital 3-D feature films *Meet the Robinsons* (2007) and *Beowulf* (2007) used the dynamic floating window both as a form of "damage control" to minimize visual conflicts with negative parallax and the vertical surround and as a means of augmenting the narrative. Because one or both sides of the motion picture frame were actively moving in visual space as the story elapsed, its use went largely unnoticed. The dynamic window simply served to make the stereo in these extended narratives easier to view over the course of ninety minutes and, subliminally, enhanced the visual dynamism of the story.

### IV. Synthetic Space

This essay takes its title from a "Stereographic Animation" by Norman McLaren, one of two short 3-D films that he created in 1951, at the request of Raymond Spottiswoode, for the Festival of Britain. McLaren's two films, *Now is the Time* and *Around is Around*, were a "synthesis of stereoscopic depth from flat drawings and artwork" and were produced on and projected with dual strip 35mm film. In a December 1951 article for SMPTE Journal about these films, McLaren

described the control of depth by the animator and novel techniques of creating parallax with movable cutouts in the art work and by lens-shift in an optical camera.

McLaren's two 3-D films represent an artistic pinnacle for the stereo cinema. Particularly because they were generated from flat material, McLaren's films highlight the synthetic nature of stereo cinema. Unlike our experience of living in the real and tangible world, a stereoscopic motion picture is, as Lenny Lipton has recently characterized it, a "plano-stereoscopic" display. The display itself is flat. And, of course, there are two of them, efficiently presented to each eye separately. It is the stereo, the 3-D itself, that is synthetic. Our experience of a 3-D movie is an utterly personal construct, interactively completed within our own vision system.

A stereoscopic filmmaker, unlike a two-dimensional artist, has the opportunity to work directly, and individually, on the binocular vision system of each member of the audience. This is storytelling that presents intriguing narrative prospects, the possibility of speaking within perception itself, and unprecedented artistic potential for emotional engagement.

Our prophet of cinema, Andre Bazin, felt that cinema was the ultimate tool for artistic synthesis. "The truth is there is here no competition or substitution, rather the adding of a new dimension that the arts had gradually lost," he wrote, "namely a public. Who will complain of that?"

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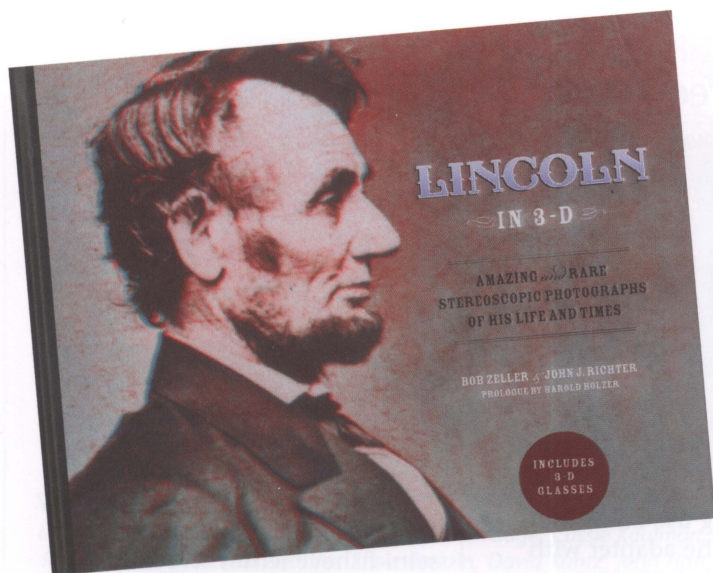
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# Filling Big Pages with Historic Depth

review by John Dennis

With the 150th anniversary of the Civil War upon us, there are already two books featuring historic views related to that time in anaglyphic format. Richard Copley's *The Civil War – A History in 3-D* was reviewed in *SW* Vol. 36 No. 2 page 33. It was followed in October by *Lincoln in 3-D – Amazing and Rare Stereoscopic Photographs of His Life and Times* by NSA members Bob Zeller and John J. Richter. Many readers own or have seen Bob Zeller's earlier two-volume work *The Civil War in Depth*, Chronicle Books 1997 and 2000, in which historic images were reproduced as full stereoviews including the mounts with publisher's logos and original view titles.

Of course there are only about enough actual stereographs of Lincoln in existence to fill a *Stereo World* article. *Lincoln in 3-D* ties examples of these in with stereos of the people, places and events involved in the Civil War with a historic narrative that covers his life and the progress of the war in ten fascinating chapters. Its 224 large (11 x 9 inch) pages allow for impressive enlargements of the images in anaglyphic stereo, and the authors have fearlessly zoomed into the historic heart of many views to reveal detail that would


be lost in most 1:1 reproductions of stereoviews. Many of these offer a historically immersive experience not found in any other Civil War books.

Purists may bemoan the loss of the entire view plus mount information, but this is really the print version of today's digital projection shows that zoom in even more boldly and pan around within images. (At least printed images hold still for careful study as long as one stays on that page.) In the full page bleed illustrations, once vertical stereos become horizontal

enlargements concentrating on the subject and cropping out sky or foreground areas. More resolutely vertical images like portraits appear as vertical anaglyphs, sometimes sharing text pages facing the large horizontal blowups and sometimes two to a page.

True to the book's title, portraits play a key role and involve many personalities besides Lincoln. As explained on page 12 of the prologue, most of the stereo portraits in the book were created by pairing up right and left images

(Continued on page 37)

From the *Lincoln in 3-D* chapter on Antietam, this view from a Library of Congress stereo negative shows a Union Army signal station on a hill near Sharpsburg, MD, with a panoramic view of the battlefield. It's one of the book's many impressive full-page anaglyphic enlargements. 



***Lincoln in 3-D - Amazing and Rare Stereoscopic Photographs of His Life and Times***

by Bob Zeller and John J. Richter,  
Chronicle Books 2010. Hardcover 11 x 9  
inches 224 pages 186 anaglyphs, glasses  
included, ISBN 9780811872317, \$35.00.



# Using The Cycloptical W3 Auxiliary Lens Adapter

by David Starkman

Cycloptical 3D has recently introduced two very interesting adapters for the Fuji W3 3D camera (by the time this is published there should also be a third adapter, and all three are also supposed to become available for the Fuji W1 3D camera). The first is a Close-Up/Macro adapter and the second is an Auxiliary Lens Adapter. As the Close-up adapter will be covered separately, I will report on using the Auxiliary Lens Adapter.

To use the adapter simply open up the W3 camera cover, so that it is turned on, and then fit the camera into the back of the adapter, securing it using a tripod screw that's part of the unit. Once fitted, the adapter expands the capabilities of the camera in several very useful ways.

First, and most important, it has 37mm filter threads in front of the camera's lenses so that filters, lens shades, and supplementary lenses (such as fisheye, wide angle, and telephoto) may be used on the camera.

Second, a flash slave trigger is incorporated into the body of the adapter, allowing use of the hot-shoe on top of the adapter with many flash units. A PC connector is also incorporated for use with flash units that use a PC cord.

Third, an ergonomic hand grip allows much easier and more secure hand holding of the camera.

Fourth, a bubble level, visible from the top or back of the adapter is included.

Fifth, a standard thread tripod socket is located on the bottom of the unit so a tripod may be used in conjunction with the adapter.

Last, it incorporates neck strap posts at either end so that the camera may be worn in the traditional manner.

The entire unit weighs just a little more than 7 ounces (210 grams), so it does not add a lot of weight to the camera. While it's nice to have all of these features, the two that will probably interest most people are the filter threads and the flash hot shoe.

## W3 Fisheye

We already had a pair of Series 7 threaded supplemental Itoresx semi-fisheye lenses. We had bought these around 1990 by mail order from one of the New York camera dealers, for use on a twinned Yashica (and later the RBT) 35mm stereo cameras. For those we had 49mm and 52mm adapters. So, first I had to obtain a pair of 37mm to Series 7 step-up rings to attach the lenses to the adapter.

Once I had the step-up rings the fisheye lenses fit perfectly on the adapter. (Smaller 37mm lens supplements are available, but we already owned these, and they seem to be very nice quality). At the widest angle of the camera's lenses I did not get a full fisheye, but very close. One can use the zoom feature to get varying degrees of wide angle images.

As the fisheye lenses are supplemental lenses, not prime lenses, I recalled that on our 35mm cameras we had to use f/11 or smaller to get really sharp slides. On my W3 tests I did not bother with this,



.....  
*Even if only lens hoods are used with the Auxiliary Lens Adapter, you gain the advantages of a sturdy handle, a level and best of all a slave trigger/hot shoe for a bigger and/or off-camera flash.*  
.....



How to get all your guests in one frame. This Fuji W3 shot with Cycloptial ALA adapter and Itores semi fish-eye lenses was taken by David Starkman, handheld, night mode, no flash, standing on a chair. Attending a November, 2010 Stereo Club of Southern California Board meet-



ing were: back row L to R, Oliver Dean, Andrew Gage, Cassie Kaufman, Lawrence Kaufman, Ray Zone, Kathleen Fairweather, Steve Berezin, David Kuntz, John Hart, Ed Ogawa and Eric Kurland. Front Row L to R: Susan Pinsky, Susanne Kerenyi and Michael Snow.

and shot under a variety of conditions, both with and without flash (using the hot shoe on the adapter!). The pictures looked sharp on the camera display, but I did not expect them to be as sharp on a 22" monitor. Much to my surprise, they held up well and appear sharp even at apertures larger than f/11. I can't explain it, but I can see the results.

## The Hot Shoe

I mentioned using the flash with the hot shoe. I have to say that I tried three different flashes until I got one that worked, a trusty Vivitar 283. Cycloptial states that because no batteries are used in the slave trigger, it does not work with *all* flashes, but will work with most. They have a link to a list of known compatible and incompatible flash units.

For my first flash shot I tried full automatic. Way overexposed. Then I tried using the recommended starting place settings suggested by Cycloptial's instruction manual. "Set the camera in manual mode, use menu to set shutter speed to 1/60 second. We recommend setting the aperture to f/9 and the ISO to 100." This happened to work perfectly, with the Vivitar set to the *blue* range of the auto setting (which was the one I used with Kodachrome 64 most of the time). Also, being digital with instant viewing, one can easily make small adjustments to the camera or flash settings to optimize the exposure.

When not using the fisheye lenses, or supplemental flash, or

both at the same time, the adapter is useful to have your camera ready for a serious day of shooting by being able to wear it around your neck like a traditional (pre-digital) camera. Add a pair of 37mm lens shades and it looks and feels more substantial, and just might be a bit less prone to lens flare as well.

For those of you who already own a W3 or W1 camera, you may be asking how to turn the camera on and off while it's fitted into the adapter, since the sliding cover (which also acts as the on/off switch) is no longer accessible.

The camera will turn itself off after an interval of non-use (adjustable in the camera menu). However, it can also be manually turned off by holding down the play button. First the camera will enter playback mode. Pressing and holding the play button will then turn the camera off.

When the camera is off, pressing and holding the play button turns the camera on, in playback mode. Then briefly pressing the shutter

button changes the mode to shooting mode. This solves the on/off problem.

Once last feature on the adapter that I noticed is that there is a brass threaded screw hole centered between the 37mm filter rings on the front face of the adapter. I wrote to Ken and Tanya at Cycloptial to ask what this was for. This is for a future accessory that is mentioned on their web page as an "optional polarizer attachment". This is not available yet, but a photo they sent me shows a three polarizer arrangement (one for each lens, and the third for viewing) which all rotate in unison. This will attach via this mystery screw hole.

These adapters are made in small batches, with a lot of hand labor involved in the final finishing of each unit. Price is US\$249.95, including shipping. Not cheap, but not bad for such a specialized unit that significantly extends the capabilities of the Fuji W3 and W1 cameras. We felt it was well worth the price for all the added benefits it adds to the camera. For more information and to order see [www.cycloptial3d.com](http://www.cycloptial3d.com).

## Avatar Easter Eggs & Panasonic Promotion

You won't have to wait for the Blu-ray 3-D to get a little bit of *Avatar* in 3-D; there's something extra special inside the Extended Collector's Edition Blu-ray of *Avatar*. The Easter Eggs include two 3-D bonus features: One is a movie trailer and the other is the four-

minute featurette *Pandora Discovered*. All you need to do is load in disc three, go to Live Extras on the main menu, and toggle down. Of course you'll need a 3-D TV to access the extras. The full Blu-ray 3-D of *Avatar* will be an exclusive to Panasonic customers.



Speaking of that electronic media giant, the Panasonic Lumix® GH2 camera wearing the interchangeable 3-D lens (less than 20mm separation) is featured in a full page ad in current mainstream photography magazines like *American Photo*. We're a long way from the days when ads for Realist or other stereo cameras were common in even *National Geographic*, but it's a start. Panasonic's Full HD 3-D Viera Plasma HDTV and 3-D

camcorder were honored by *Popular Science* magazine's "The Best of What's New" in the home entertainment category. The same model of the 3-D TV was also the category's Grand Award winner in the December issue of *Popular Science*. Panasonic's 3-D video technology also received the Wheatstone Award at the International 3D Society 2010 3D Technology Awards in October (see article in this issue).



The smaller Lumix camera model GF2 with Panasonic's 3-D lenses. Note that the lens separation barely matches the width of the hot shoe!

## Calvin Klein Eyewear's 3-D Sunglasses

We're used to being told never to use 3-D glasses as sunglasses, but ck Calvin Klein Eyewear has partnered with Marchon3D™ to infuse its patent-pending 3-D lens technology into the designer eyewear sector. The patent-pending M3D lens technology is the only curved 3-D lens on the market that is RealD certified. The curved lens, matching the contour of the eye, improves and maximizes a consumer's 3-D viewing experience, allowing for a greater image immersion. The photocromic lens technology allows consumers to wear their glasses indoors and outdoors as UVA/UVB/UV-C protected sunglasses. Part of the M3D collection, the glasses will retail for \$180. Details of the deal with RealD are at [www.marchon.com/HTMLS\\_2004/announce/announ\\_3d.asp](http://www.marchon.com/HTMLS_2004/announce/announ_3d.asp).



## 3-Designer Glasses by Gucci

The wave of high-fashion 3-D glasses includes even the Gucci name on optically correct 6-base curved lens circular polarized glasses. The Gucci 3-D lenses are said to contain a multi-layered mirrored coating which allows the wearer to view themselves in a mirror without distortion—obviously an important consideration for anyone willing to pay \$225 for glasses intended to be worn in the dark. Available at Gucci boutiques, the glasses will come in special Gucci Eyeweb black packaging personalized with their iconic green-red-green web and the Gucci 3D logo. Not known at this point is whether theaters will wave the added 3-D ticket price for those who show up wearing designer glasses, or if they will get to go to the front of the line.



## Universal LCD Active 3-D Glasses Now at Sears

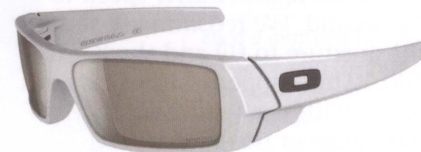
XPAND shipped its first order of Universal 3-D Glasses to Sears for its first round of availability to the consumer. The glasses will be available throughout the United States in-store and online at Sears.com. While most 3-D glasses are only compatible with a single brand of TV and cannot be used with other brands of TVs or computers, XPAND Universal 3D Glasses are compatible with any 3-D ready, infrared-emitting display. They can also be used in any of the thousands of XPAND 3-D ready movie theaters around the globe. For more information on XPAND's Universal 3-D Glasses, visit [www.xpandcinema.com](http://www.xpandcinema.com).



## "Optically Correct" Circular Polarizer Glasses

Oakley, Inc. has announced the release of what they call the world's first optically correct 3-D glasses, Oakley 3-D Gascan®. Utilizing the company's proprietary HDO-3D™ technologies, these premium glasses are "engineered for unrivaled 3-D performance, superior visual clarity and signature Oakley comfort" to optimize the technology used in the majority of 3-D

movie theaters around the world. Oakley claims the lenses virtually eliminate the ghosting or "crosstalk" between images that reach each eye from one moment to the next. Greater curvature around the eyes provides a wider field of view, but without highly precise optics, even a mild curve can cause visual distortion.



Oakley 3-D Gascan have been released in two optional frame finishes: Polished Black and Polished White. The new 3-D glasses will be available for U.S. \$120 at select Sunglass Hut locations, Oakley Stores, [www.Oakley.com](http://www.Oakley.com) and [www.Zappos.com](http://www.Zappos.com).



## 3-D TV Sales Get Failing Grade So Far

**D-** That is the grade given to the rollout of 3-D TV by Tom Galanis, operations VP for Sixth Avenue Electronics. "As an industry we could have done a better job launching it. We should have had standardized glasses and we should have presented it to the consumer as a feature of a higher quality television," he said. Compatibility was mentioned as a problem and for some reason consumers aren't buying overpriced non-bundled glasses.

### And Yet...

Consumer awareness of 3-D capable TVs has risen to more than 80 percent since March, the Digital Entertainment Group (DEG) reported. According to their research, awareness of Blu-ray 3-D players has also increased, to nearly 60 percent of consumers, over the same period.

Thirty-percent of the more than five million HDTVs expected to be sold between now and mid-January will be 3-D capable and 80 percent of consumers intending to

buy a 3-D TV would also purchase a Blu-ray 3-D player. 3-D TV sales are on track to comprise 4.5 percent of all flat-panel TVs sold this year. 3-D TVs are selling at a faster clip than HDTV was in its debut period and nearly 40 Blu-ray 3-D titles will be available at retail by the end of the year. The titles, along with a number of 3-D broadcast channels and an estimated 25 upcoming 3-D video games, represent more than 1,000 hours of 3-D programming that will be available over the next 12 months.

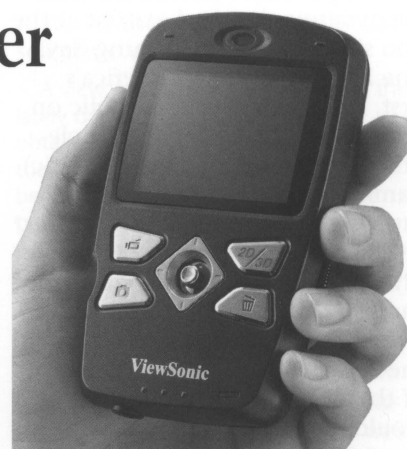
## ViewSonic 3-D 720p Camcorder

**V**iewSonic has announced the launch of its easy-to-use 3-D HD camcorder. At \$200, the ViewSonic



3-DV5 makes it easy for anyone to record their own 3-D movies and watch them back on their 3-D ready TV, monitor or projector. The ViewSonic 3DV5 features a one-touch recording function and the ability to quickly switch between 2-D and 3-D recording modes. Once users have recorded their content, then they can either plug the camcorder into their computer via USB, or plug it directly into a 3-D TV using the included HDMI cable. There is also the option to watch the content in 3-D on the device, without the need for 3-D glasses, thanks to the built-in autostereoscopic display. Videos can also be uploaded directly to YouTube's 3-D channel and watched in 3-D using the supplied anaglyph glasses.

The ViewSonic 3DV5 features an autostereoscopic 2.4" screen, as well as a Li-Ion battery which can be



charged via USB. The camcorder is able to film content in MP4 format at HD 720p resolution, and can also take still images. There is 10MB of internal memory, which can be increased using an SD card. Like the Aiptek camcorder which it so closely resembles, lens separation on the ViewSonic is only about 40mm. See [www.viewsonic.com/products/3dv5.htm](http://www.viewsonic.com/products/3dv5.htm).

## Harry's 3-D Redo

**B**ack in October, Warner Bros. announced that it was pulling the plug on a 3-D release of *Harry Potter and the Deathly Hallows Part 1*. The film grossed \$330 million worldwide on its opening weekend alone. Warner Bros. still wants to milk the franchise, as well as the opportunity to add a little 3-D. The studio was planning to release all of the previous Potter movies on Blu-ray 3-D. The Hollywood

Reporter says that each movie will also get a 3-D theatrical release.

The article says: "Eventually, all of the Potter pics will be converted to 3-D for limited theatrical rerelease and a big push in the Blu-ray Disc home-entertainment format." Dan Fellman, Warner's domestic distribution president, went on to say that a wider release just wouldn't make sense from a marketing standpoint. That said, all of the

films will get a 3-D conversion. There's no word on when the Harry Potter films will get that 3-D treatment. *Harry Potter and the Deathly Hallows Part 1* is currently raking in cash with its widespread 2-D release. *Harry Potter and the Deathly Hallows Part 2* will still be in 3-D, when it's released in summer 2011. ☐☐

# The Elephant that was Winston Churchill's Mother?

by Richard C. Ryder

When a 52-year old female African elephant known as "Petal" died at the Philadelphia Zoological Garden on June 10th, 2008, her passing brought to an end an unbroken chain of pachyderms that had existed at the Zoo since before its opening day. The Zoo, supposedly America's first, had opened to the public on July 1st, 1874, while the first elephant, a female Indian (or Asiatic) named "Mollie" had arrived on June 8th, some three weeks earlier.<sup>1</sup>

There had been a total of six elephants at the Zoological Garden in the 19th Century, one African and five Indian, two of the latter being the only males. The most massive of these, a giant named "Bolivar" would arrive as a "Christmas present" from circus promoter and P.T. Barnum rival Adam Forepaugh in 1888. Depending on how you measured him, "Bolivar" might have been even bigger than Barnum's legendary "Jumbo."

Yet the history of the Zoo's early elephant herd is the subject of some confusion, in part due to the fact that two of the elephants had the same name, while one elephant changed names, and the name of the lone African elephant is almost unknown, being recorded in but a single obscure newspaper article. With the exception of "Bolivar," all of these elephants arrived by the end of the Zoo's second full year of operation, the Centennial year of 1876, and two would die by the end of the decade.

The Zoo had been a long time coming. The Zoological Society had been founded back in March of 1859, but then the Civil War had intervened and it was not

until fifteen years later that the Garden actually opened. Opening day itself was not without incident. The Zoo's pride and joy was its spectacular Australian Collection, and one of the Yorke's Peninsula Kangaroos, supposedly startled by a passing locomotive on the railroad that looped around the west side of the grounds, bolted into a fence and broke its leg, with ultimately fatal consequences.<sup>2</sup>

And then there was "Mollie." Staked out with a stout chain on the lawn by the Bear Pits, the elephant at one point began to amble in the direction of several visitors, so frightening one young woman that she allegedly dropped her parasol and began to climb a tree. Finally noticing the chain, she

---

*Liberty Brand copy of No. 1118 by James Esson (1881), "Entrance Zoological Gardens, Fairmont Park, Phil." Designed by noted architect Frank Furness, the Philadelphia Zoo's signature gatehouses mark the Northern Entrance today just as they did 135 years ago. Dominating the foreground is Wilhelm Wolff's iconic bronze sculpture of the "Dying Lioness". First exhibited at the 1876 Centennial, the sculpture was moved to the Zoological Garden after the fair closed.*





quickly composed herself, retrieved the parasol, and retreated in some embarrassment. One suspects the newspaper that reported the incident might have made the whole thing up. And yet there is a stereograph of "Mollie" taken the following year that shows the elephant staked out in precisely the manner described.

Although the highlight of the Zoo's first year was undoubtedly the arrival of half a dozen giraffes in mid-August, by the end of the year the Zoo also had acquired two additional elephants as well. They arrived on December 31st, two females, one of which, "Maggie," was of the African species, being described (as was "Mollie") in the 1875 Guide as "not over two-thirds grown." The other newcomer was a most impressive animal indeed. Named "the Empress," she is described in the Zoo's 1875 Guide as the "largest and heaviest specimen in America"—her height, weight, and age being estimated (likely with some exaggeration) as nearly 11 feet, over 17,000 pounds, and over 100 years respectively!

All three of these elephants were featured in stereo images produced in 1875 by the first of the Zoo's official photographers, James Cremer. The view of "the Empress" is particularly intriguing. In it, a large dog may be seen lying at the base of the elephant's foreleg, illustrating one of the strangest practices of nineteenth century zoos. The following passage from the official Zoo guidebook might almost have been written with this photograph expressly in mind:

Elephants, like many other animals, are fond of pets, and in menageries they are seldom seen without one—a dog being generally chosen. Between the feet of the "Empress" will be seen one who seems to have no fear that her ponderous weight will ever descend upon him. When she first arrived, her dog was of another kind from the one she has now, and who one night suddenly disappeared, causing the "lady" to become quite restless, and apparently unhappy. When the present pet was placed in her stall, he seemed very willing at once to accept her friendship.

The dog in this view is likely the St. Bernard acquired by the Zoo in

July of 1874, just weeks after the opening of the Garden.

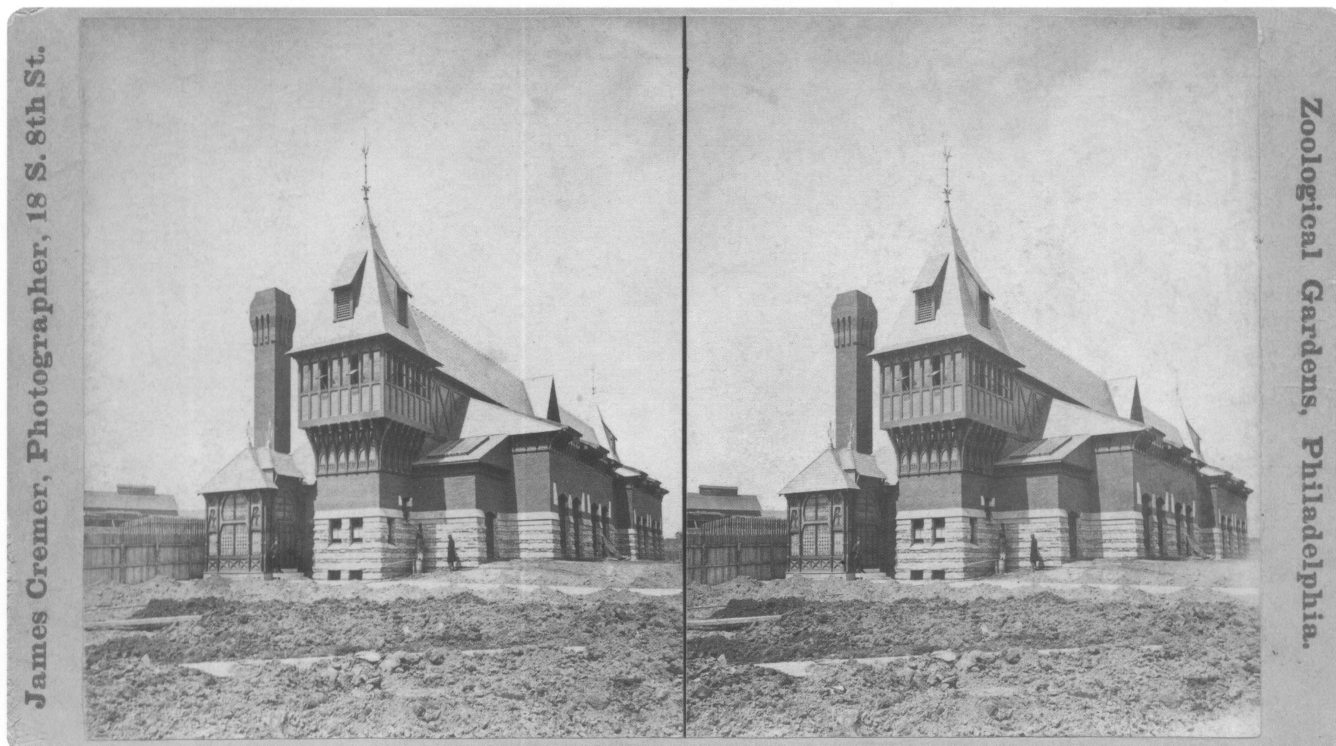
No doubt because of her impressive size, "Empress" was a popular attraction—but not for long, dying of a uterine tumor in August of 1875. So the "Empress" was gone, after an all too brief reign—gone but not forgotten. When the Zoo acquired its next two elephants late in the Centennial year, it would resurrect the popular name "Empress" for the young female.

And yet there remains one last look at the Zoo's first "Empress," a brief, bizarre glimpse some four months after her death, recorded in the *Times*. It reveals the sometimes unorthodox lengths to which the Society went to preserve material they thought might have scientific value.

A view of the bleaching bones of the lately deceased "Empress" may be obtained from one of the cupolas [sic] of the carnivora house... On the roof beneath, the great massive skull and ponderous bones of the old elephant were spread out, together with some of the tumors, which in their dry state resemble huge fungi, that caused the death of the portly animal.

Eighteen-seventy-five also saw completion of the Zoo's new Elephant House. Built along the western side of the Garden south of the Restaurant and not far from the lake, the Elephant House was

*James Cremer, Zoological Gardens, Philadelphia. Flanked by its Tudor-inspired towers, the Elephant House was also designed by Furness and is second only to the Lion House among Zoo buildings in size. In this image, probably taken by Cremer himself in late 1875 or early 1876, the fence in the background runs along the western perimeter of the Garden, while the torn up area in the foreground marks the future site of the Antelope House, the only animal building from the 1870s that still exists (as the Tree House) today.*



described in the Zoological Society's ensuing Annual Report as "195 feet long by 55 feet broad... It affords a single row of elevated enclosures, a broad walk and retiring rooms [ie., restrooms] for spectators, and ample accommodations for hay, &c. is of brick, with granite base, with second story of wood, slated [roof] and cost, complete, \$38,200." It was designed by noted Philadelphia architect Frank Furness, who (together with partner George Hewitt) also built the Zoo's iconic Northern Entrance Gatehouses. The son of a noted Unitarian minister and prominent abolitionist, Furness, who had won the Medal of Honor for bravery during the Civil War, also designed the Pennsylvania Academy of the Fine Arts and the Library of the University of Pennsylvania (where his brother was a noted Shakespearean scholar). All of Furness' architectural designs, including those at the Zoological Garden, reflect a combination of Victorian Gothic and French Second Empire styles and are noted for their ornate decoration, often employing motifs from nature, and poly-

chromy (the use of contrasting, multicolored building materials for dramatic effect).

The following year was the centenary of America's birth, and to mark the occasion a huge Exposition, America's first real World's Fair, would be held in Philadelphia's Fairmount Park, just blocks from the Zoo's Northern Entrance. (SW Vol. 21 No. 2.) This great Centennial Exhibition would play a major role in the Zoo's fortunes, dramatically boosting both attendance and income for the year, providing the wherewithal for a major construction program that would help to ensure the Zoo's long-term survival during the lean years that followed. The fair would impact the Zoo's elephant herd as well.

At the end of 1876, the Zoo would again obtain a pair of elephants, and again one would bear the name "Empress." As to why the name was recycled, the answer is relatively simple. Pedro II, the popular Emperor of Brazil (universally known as "Dom Pedro"), had joined President Grant in opening the Centennial Exhibition back in

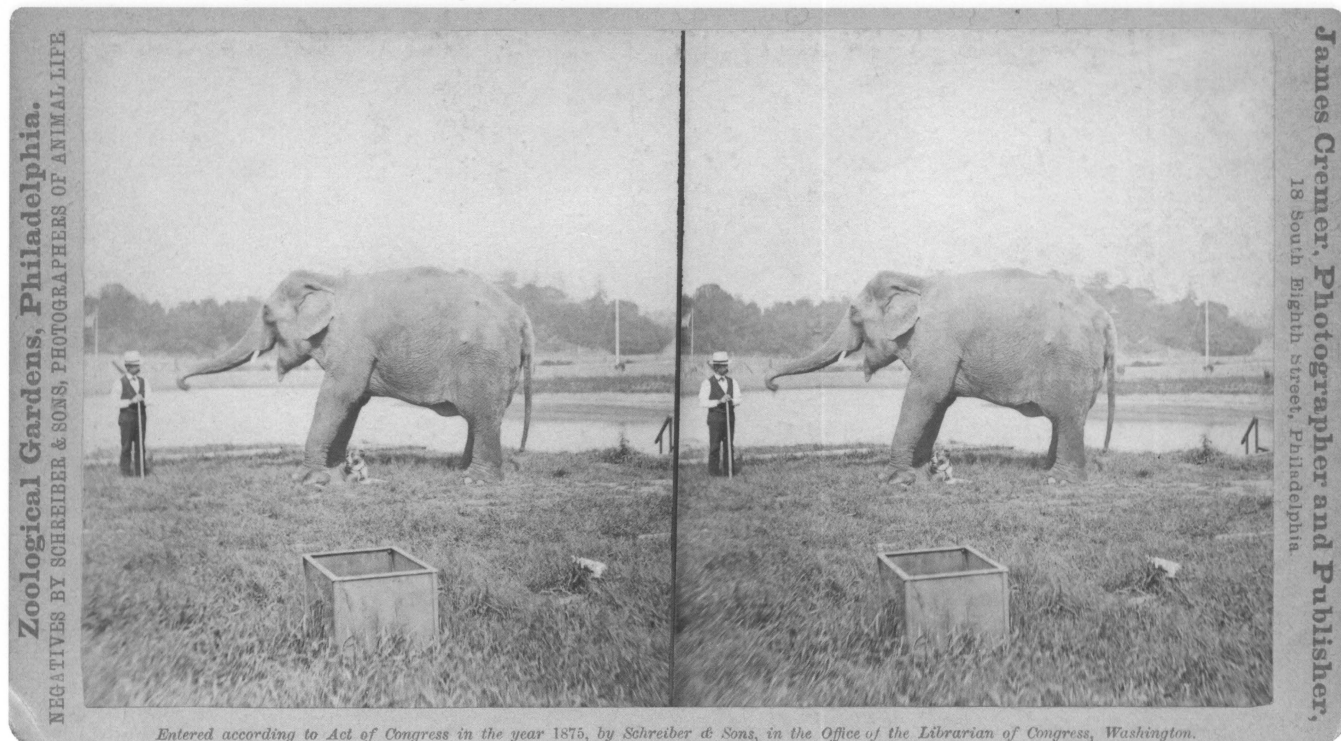
May. The Grants had then visited the new Girard Avenue Bridge and toured the Zoological Garden. Although it seems unlikely that Dom Pedro and his wife, the Empress Thereza, had accompanied their hosts to the Zoo, this would still have been the city's first experience with royalty and, when the Society acquired its new pair of baby Indian elephants, it decided to honor the royal guests. "Dom Pedro" was the obvious choice for the male, and "Empress," a name now conveniently available, was a logical appellation for the other.

Ironically, Pedro, the most well-known, internationally respected, and widely traveled South American leader of his day, would eventually lose his throne over an issue

*Detail from Cremer, Zoological Gardens, Philadelphia No. 8, showing the pet dog assigned "Empress."*



*James Cremer, Zoological Gardens, Philadelphia No. 8, "Indian Elephant, 'Empress,' (Elephas Indicus)" This remarkable view from the Cremer/Schreiber series shows the Zoo's first "Empress" standing on the shore of the lake, and depicts one of the strangest practices of nineteenth century zoos, that of providing elephants with "pet" dogs for companionship. The St. Bernard lying against the elephant's foreleg shared quarters in the Elephant House with the giant pachyderm.*



*Entered according to Act of Congress in the year 1876, by Schreiber & Sons, in the Office of the Librarian of Congress, Washington.*



close to the hearts of Americans—the abolition of slavery. Brazil was the last stronghold of slavery in the Western Hemisphere, and the institution was long-ingrained in the former Portuguese colony. Pedro supported an early end to slavery but wanted to proceed gradually in order to lessen its impact on Brazil's fragile economy. His timetable was not aggressive enough for the more radical abolitionists, while the planter class blamed him for resulting social unrest and their declining fortunes. As is often the case, trying to steer a middle of the road course that would be fair to everyone only incurred the wrath of both sides, and Pedro ended his days a largely forgotten exile in Europe.

The *Evening Telegraph* provided an interesting glimpse of the Zoo's new baby elephants during a visit in March of 1877, just a few months after their arrival. Of equal interest in the account is the overall picture it provides of the Elephant House and its inhabitants—especially the rhino "Pete"—shortly after the end of the Centennial year.

... we next enter the "Elephant House," where the principal attractions are the funny-looking, long-haired yak, the graceful and gentle eland, the elephants, the giraffes, and old "Pete," the

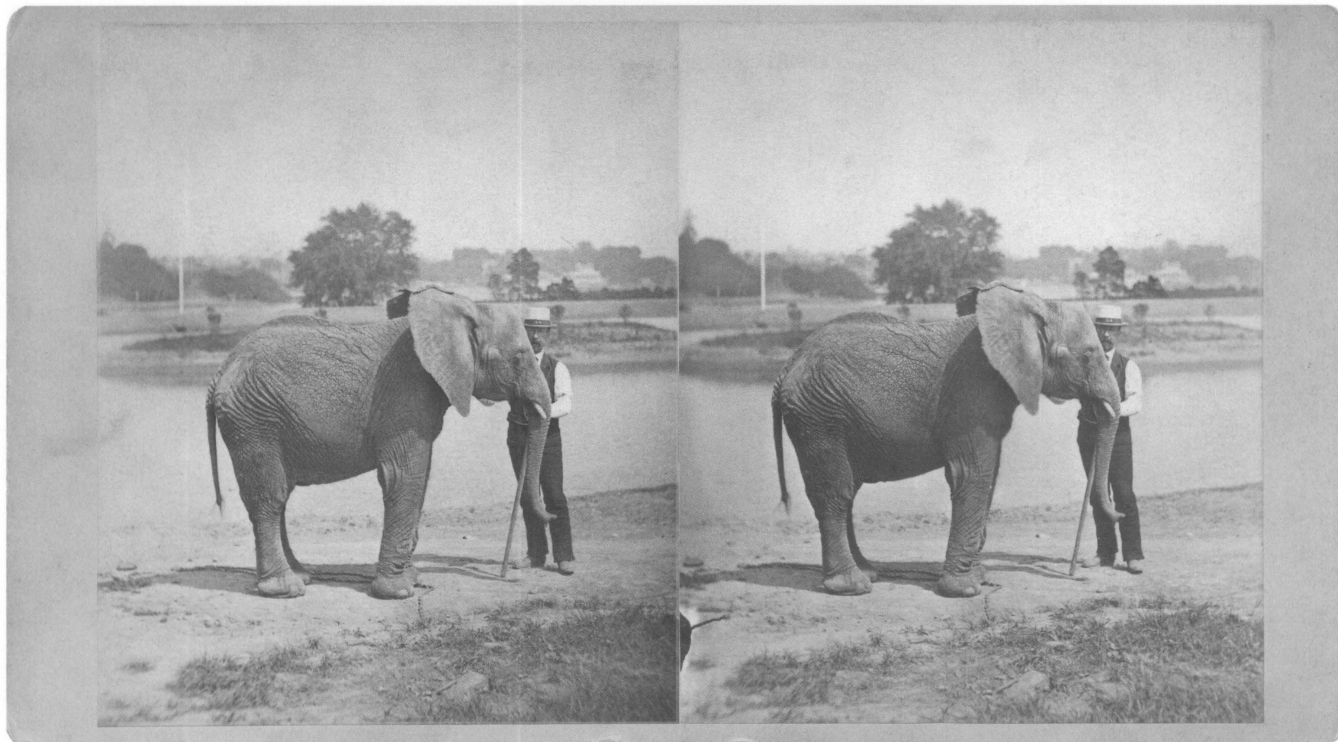
rhinoceros, and the principal abhorrence [being] those incarnate fiends the parrots. But not even excepting the elephants, the most interesting of all is the huge three and a half ton iron-clad, ugly "Pete." With his wicked-looking little pig eyes, and ugly mouth, and smooth stump of what was once a horn, we can believe all his keeper tells of him. We saw the keeper in the cage sweeping up around him, and deliberately kick him with a "Get out there, you Pete!" and he took it good-naturedly enough. We asked him if he were always as well behaved a beast. "No indeed! that [is] the same animal who got angry with his mate while in Barnum's possession. He rushed at her, and... threw her into the air fully six feet from the ground five or six times, cutting her terribly... He often gets ugly, especially in the mornings and early in the afternoon. Why only last week I made a narrow escape, being in the cage, when he suddenly got into a flurry and rushed at me, and I just got out before he reached me. Although he looks so clumsy, he is the quickest animal in the building, turning as quickly as the fastest horse."

The elephants are four in number. The two old elephants are named by the keepers "Maggie" and "Jennie," and the little fellows, who are two and three years old, "Dom Pedro" and "Empress, Jr." They are supremely ridiculous, ugly

little fellows, the young ones. One of them is about the size of a prize hog, and the other the size of a cow, with a huge aldermanic development of stomach. "What is the reason the old elephants have no tusks?" I asked. "They have broken them off in fighting and in digging them into the floor." And yet how gentle they seem and hold their trunks to the ladies and children to get their donations of peanuts or crackers as good-naturedly as if they did not know how to get mad.

Wait a minute. "Jennie"? What happened to "Mollie"? In fact they are one and the same. It was at about this time that the Zoo's first elephant underwent a curious metamorphosis to emerge with the new name of "Jennie." The reason for the change is obscure and Zoo records are silent on the matter. The name "Mollie" (sometimes spelled "Molly") simply disappears after 1875 and the same animal reappears with the new name by early in 1877. "Mollie" was already well established with visitors to the Gardens (one even wonders whether the name "Maggie" had been given to the young African elephant subsequently acquired in

*This is one of two nearly identical views from Schreiber's original 1875 grouping that show the Zoo's lone African elephant, "Maggie," tethered by a leg chain along the shores of what is today Bird Lake. The keeper is Edward Pendergast, who had primary charge of the elephants throughout the 19th Century. Born around 1830, the veteran keeper had lengthy experience with the big pachyderms, having run away from a boarding school at age eighteen to join a circus.*



part to establish an alliterative link between the two names); therefore, it is not likely that the change was simply a matter of preference. There must have been a more substantial reason for displacing the old name. But what? Is there any reason why the name "Mollie" might no longer be acceptable? The answer is yes. There was in fact just such a reason—and a fairly *dramatic* one at that!

The leading industry in northeastern Pennsylvania in the late 1800s was coal mining. There had long been serious labor unrest in the coal fields around Scranton and Wilkes-Barre, unrest that culminated in a startling series of events in the mid-1870s. For decades, mine owners had brutally mistreated the miners—with excessively long hours, a pay scale that was little more than a joke, and numerous other abuses. Mine safety was nonexistent and accidents, frequently fatal, all too common. Since law enforcement was under the control of the owners, any protests usually resulted only in still more savage repression by the hated Pinkertons, detectives hired by the owners to keep the miners in check.

With no other recourse, some miners had fought back by forming a secret society, the "Mollie Maguires." The "Mollies," as they

were known, met violence with violence, employing arson, intimidation, and even murder against the owners and their agents. For ten years, they terrorized the coal fields. Eventually, informers in the pay of the owners were able to infiltrate the organization and document its activities. The result was a series of sensational trials in 1875-76 that gripped the nation's interest and resulted in the hanging of several "Mollie" leaders. As late as mid-October of 1876, the "Mollies" were continuing to make headlines as fourteen members of the group were sentenced to lengthy prison terms, with several trials still pending. By 1877, the organization had collapsed. This was just at the time the Zoo's elephant was so mysteriously renamed.

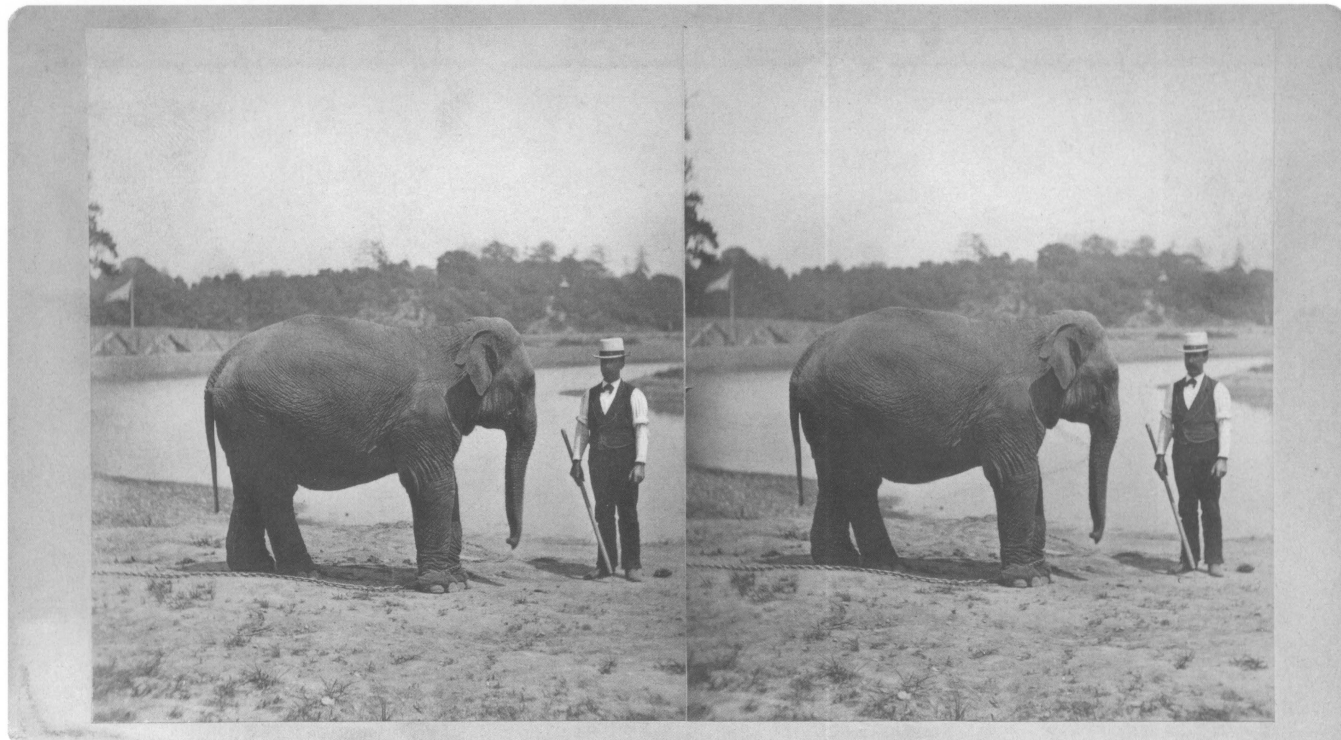
Clearly, the name "Mollie" had become what we would today term "politically incorrect." Furthermore, it would have been especially distasteful to those members of the city's professional and business classes from which the Zoo drew its primary financial and organizational support. Given that several

members of the Zoo's governing Board had made their fortunes in coal, this would have been a particularly sensitive issue and it is even possible that pressure for the change may have emanated from that source. So, although we cannot be completely certain, the national excitement over the exposure of the "Mollie Maguires" seems the most likely explanation for the Zoo's action.

But why "Jennie"? Here we are on somewhat shakier ground. It has been suggested that it was to honor Jenny Lind, "the Swedish Nightingale," who had created such a sensation when she first toured America, courtesy of P.T. Barnum. True, Jenny Lind had wowed Philadelphia twice in 1850, when she sang under Barnum's sponsorship on October 17th and again on November 27th. But that was more than a quarter century ago, long before the Civil War and, given the passage of time and intervention of events, seems clearly unrelated.

There is another dramatic possibility, albeit at first glance seemingly a remote one. Jennie Jerome

*The Zoo's first elephant, "Mollie," photographed by Schreiber in 1875. By the next year, in response to the labor violence of the "Mollie Maguires" in the Pennsylvania coal fields, the "politically incorrect" name would disappear and be supplanted by "Jennie." The elephant would have a long and distinguished career at the Zoo, offering rides to tens of thousands of enchanted children and adults for some two decades, before succumbing in 1898.*





was the daughter of wealthy New York entrepreneur and sportsman Leonard Jerome and was perhaps the most famous American heiress of her day to marry into the ranks of British nobility, having wed Lord Randolph Churchill, the second son of the Duke of Marlborough, in April of 1874, just as the Zoo was preparing to open. She had given birth to a son, Winston, that November. For two years, Lady Randolph (her official title) had been at the center of England's social elite.

Now in 1876, the Churchills were again in the news. Lord Randolph had unwisely become involved in a steamy scandal that pitted his brother, the Marquis of Blandford, against the most powerful man in English society, Edward, the Prince of Wales and future king of England. As usual, where the Prince was involved, the scandal was over a woman. Blandford was about to be named as third party in a messy divorce case, and, unless the whole thing was swept under the rug, Randolph threatened to produce letters naming the

Prince as another of the lady's paramours. Always impulsive and irrational, Randolph had even gone so far as to privately threaten to challenge Edward to a duel, an act that—given the Prince's position as heir to the throne—was patently absurd.

In retaliation, the Prince had given strict instructions that the Churchills be completely excluded from all social functions, both public and private, given by any member of the British upper class. Although the reasons for the Prince's actions remained largely secret, the ostracizing of the American heiress was public knowledge and had created a degree of sympathy for her on this side of the Atlantic—at *precisely* this time. Could the renaming of the Zoo's elephant have been in response to this?

Could the Zoo's elephant then have been named for *Winston Churchill's mother*? Wishful thinking? Perhaps not. In the late summer of 1876, in part to escape the lingering awkwardness at home, Lord and Lady Randolph jour-

neyed to America to visit with Jennie's family. Landing initially in Canada at the end of the late summer heat wave, the pair were soon highly visible guests at Niagara Falls, and subsequently in New York City, as well as among the fast set at Newport and Saratoga Springs. But it was Jennie's uncle, Lawrence Jerome, who took the pair to visit what was the year's biggest sensation, the great Centennial Exhibition in Philadelphia.

The Philadelphia visit came toward the end of the American trip, with the Churchills spending "several days" being shepherded through the exhibits by Uncle Lawrence, before returning briefly to New York and thence home to England. Jennie, it was noted, was particularly impressed by the Women's Pavilion.

So Jennie Jerome, Lady Randolph Churchill, was a prominent visitor to Philadelphia at the very time that the Zoo's elephant was so mysteriously renamed—and at the time the Zoo's new baby elephants were being named in honor of the Centennial's other celebrated guests, the Brazilian Emperor and his wife.

Upon their return to England in November, the Churchills found themselves still *persona non grata*

Centennial Photographic Co. No. 3005, "Indian Elephant." This faded Wilson stereograph from 1877 shows the Zoo's entire elephant herd, with "Jennie" in the center, infants "Empress" and "Dom Pedro" (yes, they're both there) behind her head, and African elephant "Maggie" in the background at right.



(Edward not being one to forgive and forget) and were soon packed off to an administrative post in Ireland. The young Winston's earliest childhood memories would be of the years of exile in Ireland. Not yet two at the time of his parents' 1876 Centennial visit, the future Prime Minister had not accompanied them on the trip. In typical upper class Victorian fashion, he had been left behind in England in the care of his beloved nanny, Mrs. Everest.<sup>3</sup>

Might the Churchills also have visited the Zoo at the time of their Centennial tour? An interesting possibility although, given how much there was to see at the Centennial, perhaps an unlikely one. As to the name, while it is *probable* that Lady Randolph is in fact the origin of the name "Jennie," it is after all by no means certain.

Almost a year after the arrival of "Mollie" (and a year before she changed names), on the 22nd of May, 1875, the Zoological Society signed an agreement with James Cremer, the city's most prominent publisher of stereoscopic views. The contract gave Cremer the

"exclusive right to take photographic views and make and sell photographic pictures, stereoscopes, graphoscopes, guide books other than that of the Garden, newspapers, periodicals, albums, and medals within the Garden of the said Society" and "for these purposes to occupy the building in the said Garden lately used as a cigar stand." The contract was to run for eighteen months, from the first of July, 1875, through the thirty-first of December, 1876. For this privilege, Cremer was to compensate the Zoological Society a total of \$900, payable in fifty dollar installments on the first of each month.

The contract further stipulated that "all photographic pictures, views, and designs sold within said Garden shall be in the best style of the art" and that all of Cremer's merchandise would be "subject to the approval of said Society." It was undoubtedly this last provision that led Cremer to employ the firm of Schreiber & Sons to do the actual photography on the Zoo grounds. The Schreibers were noted for their animal photogra-

phy and we can be certain that the arrangement won the blessing of the Zoological Society for any such "subcontracting" without the approval of the Society was explicitly forbidden by the terms of the contract. So began the first venture in stereography at the Philadelphia Zoo.

James Cremer was a likely candidate to be the Zoo's first stereographer. Born in London in 1821, Cremer had emigrated to the United States around 1843, working for a Waterbury, Conn., photographic supply firm and subsequently for that of Edward Anthony in New York before coming to Philadelphia, where he established his own photographic supply house in 1855, providing materials to many of the city's sixty daguerreotype studios. By 1860, Cremer was located at 18 South 18th Street, where he concentrated on the sale of stereoscopes and views, although for a time he also operated a portrait studio on the second floor of his establishment.

Cremer helped to found the National Photographers' Association, and was elected as both a Vice-President and a member of the Executive Committee. As such, he was prominent in the Association's successful legal fight against the renewal of a patent that forced

James Esson No. 1121, "Elephants Bathing Zoological Gardens Phil." Some five years after their arrival, the young elephants "Dom Pedro" and "Empress" enjoy a dip in the new Elephant Pool with the Zoo's veteran "Jennie." The observation tower and distant line of trees mark Lemon Hill, on the far side of the Schuylkill River. The card is one of a small group taken by Montreal's James Esson in 1881.



ENTERED ACCORDING TO ACT OF PARLIAMENT OF CANADA IN THE YEAR 1881. BY JAMES ESSON. IN THE OFFICE OF THE MINISTER OF AGRICULTURE



photographers to pay a licensing fee to use bromide in the "wet-plate" collodion process, a restriction that had severely hampered development of the photographic art in the United States for several years. In 1869, Cremer traveled to Burlington, Iowa, as part of a highly successful scientific expedition to photograph a total eclipse of the sun. Four years later, he was hired by the city to document in stereographs the construction of the New City Building (as City Hall was then called), and the year the Zoo opened his stereographs of Fairmount Park earned a bronze medal at an exhibition held at the Franklin Institute. Now one of the city's most prominent and respected businessmen, Cremer, at 53, was one of the largest publishers of stereoscopic views in the United States.

The exact nature of Cremer's relationship with the Schreibers is unclear but was undoubtedly prompted by their widespread renown in the difficult field of animal portraiture. Admittedly, most of their well-known "Animal Studies from Nature" series of stereographs represented dogs, poultry, and racehorses and it remained to be seen whether their expertise would carry over to the more exot-

ic specimens in the Zoological Society's collection.

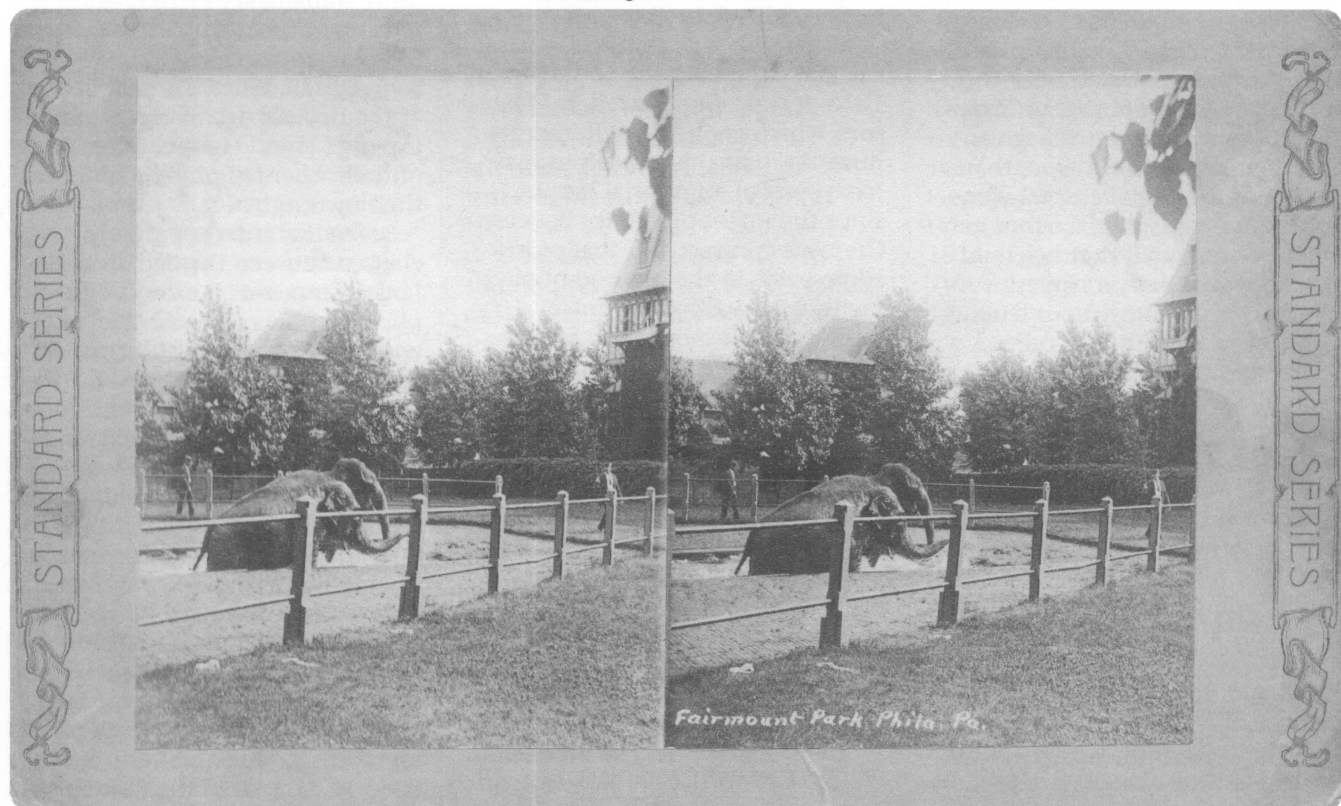
Born in Germany, George Francis Schreiber, the head of the family, had come to America in 1832. Here he published a German language newspaper for several years before beginning his photographic career in partnership with Philadelphia photographer Frederick Langenheim. He subsequently settled at 818 Arch Street, where as Schreiber & Sons he conducted a successful portrait studio for several years before turning to the more unusual task of photographing animals. By 1870, with the elder Schreiber now approaching seventy years of age, it was sons Henry, Conrad, and Gerhard who did most of the work on the "Animal Studies from Nature" stereographs, and presumably on the Zoo series as well.

An initial group of twenty-eight stereographs of the Zoo was published by Cremer in 1875. These views are on oversized cards ("cabinet mounts"), dull yellow in color, each with an ornate back, the number and title being indicated

by an narrow strip label at one end. Orange lettering on the face of the card proclaims "Zoological Gardens, Philadelphia" and "James Cremer, Photographer and Publisher" along left and right borders respectively, with "Negatives by Schreiber & Sons, Photographers of Animal Life" and Cremer's business address in smaller type. Across the bottom of the card runs a copyright notation: "Entered according to Act of Congress in the year 1875, by Schreiber & Sons, in the office of the Librarian of Congress, Washington."

Of these twenty-eight stereographs, fifteen are views of animals and thirteen views of the grounds. The selection of subjects is rather limited; among the animal group, four are views of the highly popular giraffes, four of the elephants, and except for a single view of a wolf, the remainder all show inhabitants of the deer paddocks. This suggests that the whole operation was hastily carried out, a supposition borne out by the rapid addition of views of the zebra, alligator, and eland, all animals

*The Philadelphia Zoo elephant pool stereographed by Alfred S. Campbell in 1896. Damage to the fence surrounding the pool led to the chaining of "Dom Pedro" in 1882. The larger elephant is "Jennie," with "Empress II" in the foreground. The Antelope House is in the background and a corner of the Elephant House appears at extreme right.*



unrepresented in the initial group. These have handwritten rather than strip labels and, although they too appear on cards with the Schreiber copyright line, they were apparently not in fact copyrighted. One particularly surprising omission is views of the big cats; these were always highly popular attractions and Wilson & Adams, who stereographed the Zoo just two years later, included numerous views of the felines in their series.

Besides the view of "Empress" with her pet dog, another image of exceptional interest is that of the zebra from Schreiber's supplementary grouping. This is a female Burchell's zebra that arrived at the Zoo on January 6, 1875, and is the only animal of an extinct type known to have been stereographed at the Philadelphia Zoo.

In 1876, Cremer severed his relationship with the Schreibers for reasons which are not entirely clear, although their efforts may not have lived up to Cremer's expectations. Certainly the failure to include a wider variety in the animal views may have been disappointing, and the views of the buildings and grounds do not exhibit particularly impressive composition, at least in comparison with the later Centennial Photographic Co. series. Then too, there is a rather static monotony to the Schreiber elephant views, all four of which are taken from the same, somewhat flat and uninspiring broadside perspective—given that these represented more than a quarter of the initial animal views, not very encouraging! Cremer may well have reasoned that he could produce equal or even superior views on his own, without sharing his proceeds with the so-called "experts."

Cremer issued at least seven additional views of his own, on card stock identical to that of the earlier views except for the substitution of his own name for Schreiber's and an 1876 date in the copyright notation. This new group included views of the bison, as well as both Bactrian and dromedary camels. Cremer also produced additional Zoo views, such as those of the bear pits and interior of the restaurant, which appear on card stock lacking the copyright



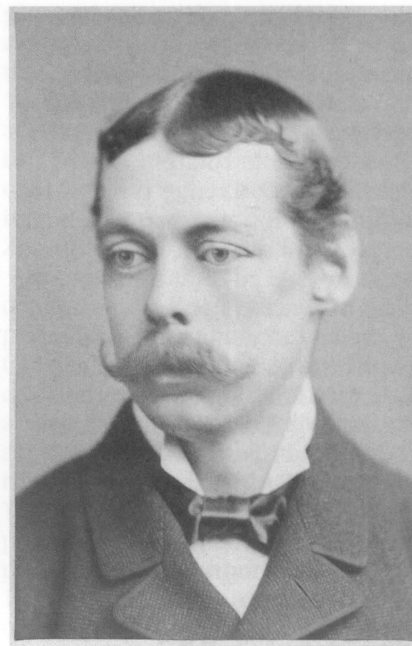
*Former New York heiress Jennie Jerome became Lady Randolph Churchill upon her marriage in 1874. The couple's visit to the Centennial Exhibition in Philadelphia two years later may have inspired the renaming of the Zoo's first elephant.*

*(Cabinet card by Vander Weyde of London)*

line. Cremer's views seem to have been taken during the winter of 1875-76, as the leafless condition of the trees indicates, in striking contrast to the lush foliage evident in the earlier Schreiber group.

When Cremer's contract with the Zoo expired at the end of 1876, it was not renewed, for reasons which are unclear. It appears, however, that the difficulties may have been of a financial nature, since the major difference between Cremer's contract and that of his successor is in the method of payment, with 10% of the gross receipts being substituted for the straight \$50 per month fee. What is not clear is whether Cremer believed he was paying too much for the privilege or the Zoological Society felt it was receiving too little. In any event, Cremer and the Zoo parted company.

It may also be that Cremer was beginning to wind down his career. In 1877, he sold his portrait gallery and spent much of the year abroad, in Switzerland and England. Nevertheless, he continued to publish his stereo views for several years, finally selling out to



LORD R. CHURCHILL, M.P.

STEREOSCOPIC CO.

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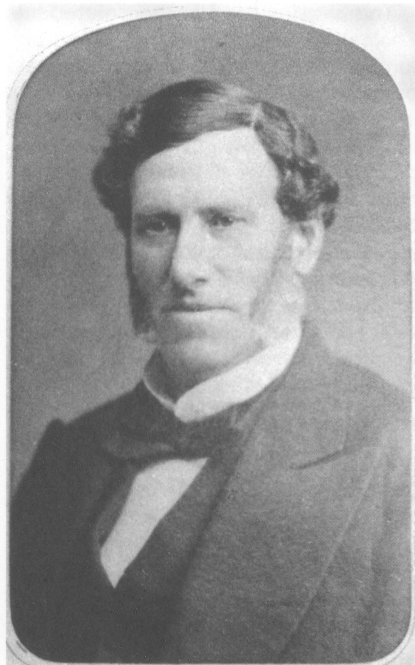
*Lord Randolph Churchill, eccentric younger son of the Duke of Marlborough. His notorious feud with the Prince of Wales was one reason for the Churchills' extended visit to America in 1876. Photographed about the time of the American trip, Churchill would go on to serve briefly as Chancellor of the Exchequer before resigning in 1886 in a quarrel over government spending.*

*(CDV by London Stereoscopic Co.)*

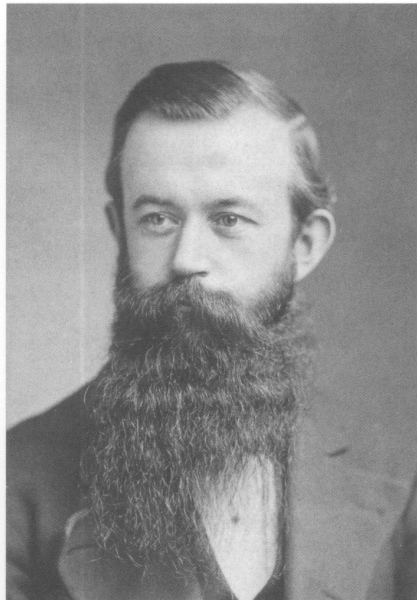
John Wanamaker in 1882 and retiring to Brooklyn, N.Y., where he died eleven years later. The elder Schreiber had died the year before, at the ripe old age of eighty-nine, leaving behind eight children, all of them talented photographers in their own right.

Several months apparently elapsed between the departure of James Cremer as the Zoo's official photographic concessionaire at the end of 1876 and the choice of a successor. This was Edward L. Wilson, editor of America's most influential photographic journal, and in 1877 just coming off a banner year as head of a partnership that had held the exclusive right to take and sell photographic images (including stereographs) within the Centennial grounds. One of the founders of the National Photographic Association, Wilson had spearheaded a successful drive for a separate building devoted to photography at the Exhibition. Subsequently, as head of the Centennial





Noted photographer James Cremer was the Philadelphia Zoo's first official photographic concessionaire, operating from a structure adjacent to the Monkey House that had originally been designed as a cigar stand by budding architect William Masters Camac, who also happened to be the son of the Zoo's President. Evidently, even in the 19th Century, a little nepotism went a long way.



Edward L. Wilson, well-known Philadelphia photographer and founder (with W. Irving Adams) of the Centennial Photographic Co., the firm that held exclusive rights to photograph the 1876 Exhibition. The pair would enjoy similar privileges at the Zoological Garden the following year, going on to produce the second (and most extensive) series of Philadelphia Zoo stereographs.

Photographic Co., Wilson ultimately issued upwards of 4000 different views (stereo and non-stereo) of the Exhibition.

As to the Zoo concession, Wilson and his partner, W. Irving Adams, signed their agreement with the Zoological Society on May 28th, 1877, upon terms that, except for the manner of payment, were virtually identical with those granted to Cremer. The contract was to run for one year, commencing on June 1st.

Wilson's Zoo views were issued on the same oversized card stock as his Centennial Series, with identical labeling, as a result of which they are sometimes confused with the Exhibition views. Wilson & Adams listed some 54 Philadelphia Zoo stereographs in their 1879 catalog (nos. 2966-3019), approximately equally divided between views of specific animals and those of the grounds. In addition, there were at least half a dozen unnumbered views of the pair of chimpanzees (the Zoo's first), which arrived at the Gardens on May

2nd, 1878, just twenty-nine days before the Centennial contract with the Zoo was due to expire.

Unlike Schreiber's views of the grounds, many of which are fairly straightforward, unimaginative shots of individual buildings, Wilson's scenic views are carefully planned, and reflect a careful attention to the principles of three-dimensional composition. His views of the animals also demonstrate far greater variety than is present in the stereographs of Cremer and Schreiber. These include numerous views of the big cats, along with brown and polar bears, various monkeys, rhinoceros, kangaroo, and several birds and reptiles, virtually all of which were unrepresented in the earlier series. Both African and Indian elephants also appear in the Centennial Photographic Co.'s views.

Although the evidence is circumstantial and somewhat speculative, Wilson's contract with the Zoological Society may have been extended beyond the original terminal date of May 1878, but probably not past 1880. The 1880 edi-

tion of the Zoo guidebook still makes reference to the photograph stand "on the right of the walk on the way out, close by the Monkey House," further noting that "Photographs of many of the animals in the collection can be purchased here at very moderate prices." It is virtually certain that this can only refer to the Wilson & Adams stereographs. And yet by 1881, Montreal photographer James Esson was able to produce a few views inside the Zoo grounds, indicating that Wilson's exclusive contract was no longer in effect. Nor were there any successors. A dramatic falloff in attendance at the Gardens following the Centennial year suggests that photographers would no longer have found attractive the kind of exclusive arrangement enjoyed by Cremer and Wilson.

Wilson's views, combined with those of Cremer and Schreiber, provide a richly detailed record of the first years of "America's First Zoo," a record to which Esson also contributed in a limited way. The Canadian photographer issued a small number of views of the Philadelphia Zoo which appear on both cabinet and standard-sized mounts, and which bear an 1881 copyright date.

Throughout history, children have always enjoyed interacting with animals, and "rides" have long been a popular attraction at zoos. The Philadelphia Zoo had recognized this almost from the start, signing a contract with George Lucas to provide donkey rides at the Zoo as early as May of 1876 at a cost of 10 cents each. Three years later, in 1879, the Zoo prepared to go one better. When the *Evening Telegraph* visited the Zoo in early June, the question came up.

"Are you going to train the camels to carry children and others?" was asked the Superintendent.

"We did intend to but although with patience and care they could be so trained, yet, even at its best, the camel is a treacherous animal, and will turn on even its keeper in its angry moods, and the latter are very uncertain. It would make the Garden much pleasanter to have other animals to ride than the donkeys or goats, and for some time we have been getting the largest of the Asiatic elephants, Jennie, trained to harness.

Mr. Pendergast, her keeper, and a very experienced man, has been training her. She is an old circus animal, and from the first moment the keeper took her in hand it was seen that the intelligent brute recollected her old-time experience and could easily recall it.

"So much so that if it were not for its previous training we should never have undertaken to break it in, for the first lessons to an elephant are of necessity extremely cruel not to say brutal in their character. Although very intelligent, yet the elephant is very stubborn and has to be taught obedience with harsh lessons. The keepers and trainers are obliged to use the sharp iron-pointed pikes and hooks to force submission, and before that comes the animal has to be goaded until the blood streams."

"Now all we have to do is to use it to its new work. At first it showed a disposition to shake any one off, and, in fact," said Mr. Broem, "I was the first one to mount its back, which I did bare-backed, and stood balancing myself while it kicked and backed, but was glad to jump when it deliberately laid down and prepared to roll over. However, by a little patience the elephant is now very gentle, and in the course of a week or ten days will be ready for the children to take a ride on her back. One great difficulty was the difficulty of keeping the "Howdah," in which the children are to ride, on the animal's back, owing to its roly-poly shape, but this was soon obviated."

Within two weeks, the elephant was, as promised, in service, and a reporter from *The Record* showed up to check out the action:

## ON AN ELEPHANT'S BACK. ORIENTAL CUSTOMS REVIVED AT THE ZOO.

### How Jennie Acts Under the Saddle - The Experience of a First Ride.

"Sure you can manage him?"

"Oh, perfectly; she's as gentle as a lamb."

Then a dainty little foot peeped out as if about to step aboard, and suddenly popped out of sight again just as its fair possessor was seized with another inquiry:

"Will he lie down?"

"Oh! no; she won't lie down," was the assuring response, gently reminding the lady that it was not a "he" by emphasizing the "she."

The lady stood gazing thoughtfully into the lake at the Zoo, and then exclaimed:

"Oh! my; I don't know what to do."

After a moment's contemplation the die was cast. "I never rode on an elephant in my life, and I'm going to do it now," said the heroic madame and immediately a bevy of little ones exclaimed:

"Mamma, take me! take me! I want to go too."

"Can he carry all of us?" inquired the considerate dame.

Yes, madame; she has carried four men with perfect ease, so don't be alarmed. Just get aboard, and you'll see how pleasant it is to ride on an elephant. Beats riding a camel all to nothing."

With all the care that one would naturally exercise in attempting to step on a huge soap bubble without bursting it, the fair adventuress and her little flock seated themselves in the capacious howdah. Immediately the "conductor" took his seat in the car and the bulky form of the elephant began to swing himself around the circle. The journey having been completed, the elephant riders dismounted and declared: "It was real funny riding up there."

"Like to take a ride?" inquired Superintendent Brown of the news gleaner; and the scribe got aboard. The elephant started. Not being perfectly accustomed to Oriental modes of conveyance, the uninitiated reporter at once began to realize the force of the lady's description that "it was real funny." First something gave way on the right hind quarter, and a corresponding elevation took place on the left front flank. This action was relieved of its monotony by a sudden sinking on the left rear and a heaving up of the right front. By the time this action had been completed the elephant was so far from the "depot" that it was useless to think of disembarking.

"Better hang on to the railing," suggested the conductor; and at once the scribe clutched the rail which had been provided to add to the security and safety of the passengers.

"How do you like it?" inquired the conductor.

"Capital!"

The reporter went down behind and the conductor rose up in front. Then a real "funny" feeling began to take possession of the scribe—a kind of a cross between seasickness, dizziness from waltzing, and the description a man gives of himself when half drunk.

The length of the howdah precludes the possibility of seeing the animal while seated on his back. One is rocked in the air. Curious to see the gentle beast plodding along under his burden, the reporter took a peep over the front of the howdah, but all he could see was a tail [evidently the trunk]. He looked behind: he saw a tail. Then he looked over the sides, and saw nothing but the ground.

This pleasure the managers of the Zoological Garden are now prepared to furnish to their visitors. For two months or more Mr. Pendergast, the gentleman in charge of the elephant, has been training "Jennie" for the duty she will now perform daily. "Jennie" was originally from Robinson's circus and had been thoroughly trained for the ring. She is accustomed to carrying children and men, but heretofore has been instructed to give her passengers short rides and then precipitate them into one common heap by suddenly lying down and shaking herself like an earthquake. . . .

Presumably the Zoo would choose to omit this *last part* of the experience from their program.

Less than a month later, the Zoo lost "Maggie." The Society's lone African elephant died of a dysentery-like condition on July 10th of 1879. There would be no further alterations in the makeup of the Zoo's elephant herd for nearly a decade.

It was with mixed feelings that the Zoo noted the death of "Dom Pedro" in 1886. That year a new Guidebook had commented that the male Indian elephant had displayed an increasingly dangerous temper as he approached maturity, requiring that he constantly be chained, and that handlers keep a wary eye on him at all times. When he died in December, the Society no doubt experienced a profound sense of relief akin to that felt by London Zoo officials when showman P.T. Barnum had purchased the famous—but increasingly troublesome—"Jumbo" a few years earlier. Big and irascible male elephants are an accident, often a fatal one, waiting to happen.

The chaining of "Dom Pedro" had been necessitated back in October of 1882. This was a complex and dangerous procedure that apparently stretched over the better part of two days. As such it was an event of widespread interest and considerable drama, and drew the attention of the press accordingly, with no less than four newspapers covering the various phases of the process. The *Times* provided the most extensive coverage.

It is more than probable that if Dom Pedro, vicious and case-hardened elephant as he is, had fully appreciated the punishment his general depravity was leading him to he would have reformed



and become a model of elephantine docility. He didn't appreciate that fact until yesterday, when a dozen men, armed with block and tackle, ropes, chains, and harpoons, after three hours' work, succeeded in convincing him that he was wrong. Dom is 9 years old and, although seven feet high and weighing something like five tons, is the smallest elephant in the Zoo. He was added to the collection in 1876, but it was not until a year or so ago that he demonstrated that he could conceive and carry out more wickedness than all the proboscidi-ans in the Garden. The vigorous way in which he slapped and banged and slammed and kicked the keepers around made him a terror. On Thursday last he charged on and came very near killing [his keeper, who]... escaped by taking a leap through the pen door at the instant Dom's tusks went crashing through the two-inch oak plank wall that backs the spot on which the keeper had stood.

The *Evening Bulletin* attributed the survival of the keeper, Edward Pendergast, to the interposition of the female elephant "Empress," which was certainly possible as they had been kept in the same pen until after the incident, when the latter was transferred to room with the larger female "Jennie."

The papers differed widely on the history of the elephant's aggressive behavior, with the *Bulletin* alleging that "almost from the first Dom Pedro's attendants became conscious that his temper was bad," while the *Telegraph* credited his temper to advancing age

and the *Press* averred that, although not:

considered by any means the most tractable of elephants, he had, until a few weeks ago, never evinced any desire to demolish... property... or to crush the bones of his attendant. With the public—especially the juvenile element—he has always been a great favorite; for he was the most patient of beasts while standing with his trunk lifted high in the air, his mouth opened to its almost limit, and his small, sharp eyes intently watching every movement of the dozen or more youngsters who made his great paws a target for peanuts, cakes or other small delicacies.

The problem had apparently begun a few weeks earlier when the elephant had broken off one of the bars that formed the perimeter of the outside enclosure that contained the bathing pool, and had since been denied access to the outside yard. With the attack on Pendergast, more stringent measures were evidently called for.

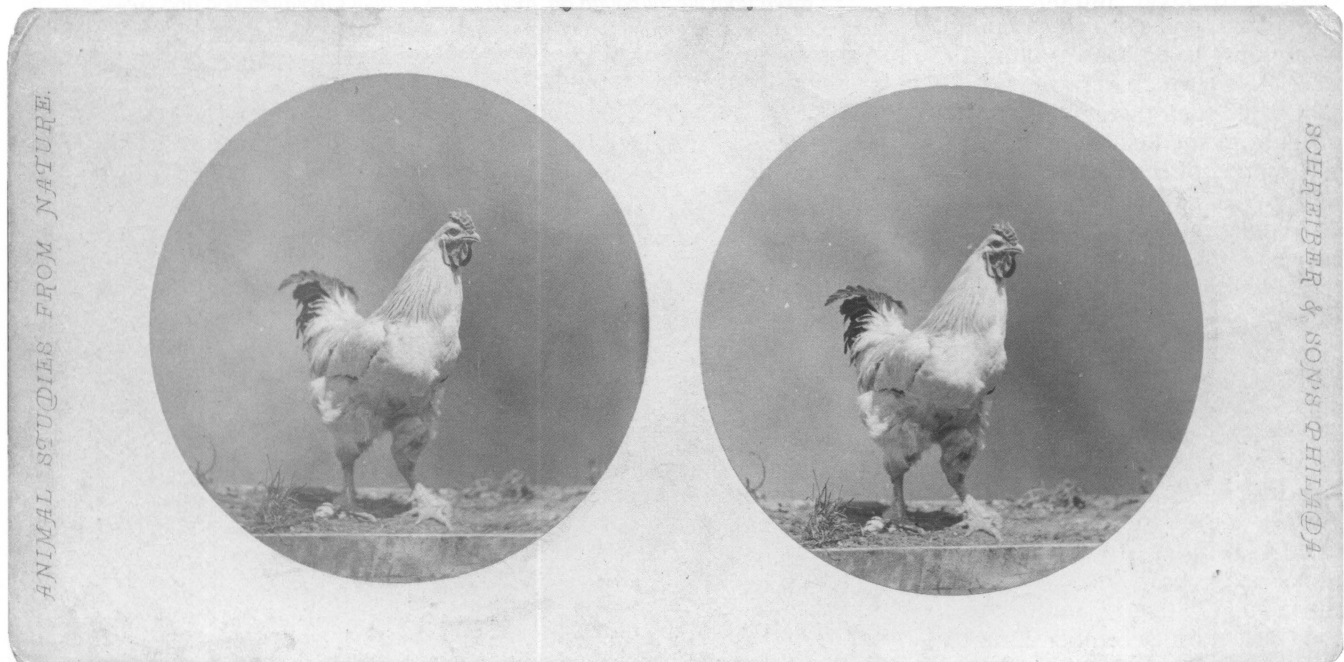
According to the *Bulletin*: "Empress was placed in the other apartment; Dom Pedro was thrown and his head secured by a sort of martin-gale attachment to his forelegs, so that free motion of his head is checked. He was also secured by stout chains close to the front of the cage." Today, the

handling of large and dangerous animals is facilitated by the use of powerful tranquilizers. Back then, this was not the case. The whole procedure was rather dicey and for a time it was very much touch and go whether all the keepers involved would emerge with life and limbs intact. One poor individual was kicked completely across the enclosure but emerged with only a few bruises.

It is rather uncomfortable to read such accounts today. And yet, by and large, zoo elephants were treated far better than those in circuses or those in domesticated service abroad. In such venues, more complex and unerring behavior was demanded of the big animals, behavior that could only be inculcated by truly savage and bloody training. Note also that when the Zoo had opted to utilize "Jennie" for the howdah rides, it only did so because she was already familiar with such duties from her circus days. Superintendent Brown was not about to put her through the trauma of initial training that a new elephant would have required.

It was a sad business all around. Although the elephant would henceforth suffer the rigors of

The Schreibers' renowned "Animal Studies from Nature" largely consisted of racehorses, pets, and other domestic fare; their expertise apparently did not carry over into the more difficult area of exotic Zoo animals and their work for Cremer was indifferent at best. As a result, they and Cremer soon parted company, with the latter issuing a number of additional views of the Zoological Garden on his own.



close confinement, it was the only viable alternative to the unpleasant option of putting the animal down. He had become too dangerous to simply leave to his own devices. The problems with "Dom Pedro" would prove to be something of a dress rehearsal for similar dealings with a larger—and demonstrably lethal—elephant later in the decade.

Some two years after the death of "Dom Pedro," the only new elephant to augment the Zoo's dwindling herd during the 1880s and 1890s arrived at the Garden. On the 25th of December, 1888, the Zoological Society became the recipient of what must be accounted one of the largest and most bizarre Christmas presents of all time. "Bolivar," a full-grown male Indian elephant originally from Ceylon, was presented to the Zoo by the well-known circus promoter and dealer in exotic animals, Adam Forepaugh, who years earlier had given the Zoo's temperamental tiger "Jim" a much-needed pedicure. This former butcher had begun his career in Philadelphia dealing horses to streetcar lines and, by the end of the Civil War, found himself in possession of a circus. Then had come the "elephant wars" of the 1870s and 1880s.

Forepaugh had apparently acquired his enormous pachyderm from Van Amburgh's menagerie in 1882, in response to Barnum's purchase of the great "Jumbo." (Forepaugh had not been alone in responding to Barnum's coup—the W.W. Cole circus had promptly purchased their own giant, "Samson," from the Reiche brothers.) The merger of the Barnum and Bailey circuses had also created a crisis of numbers. By 1883, Forepaugh was forced to exhibit no fewer than twenty-five elephants to keep pace.

Now, in 1888, Forepaugh was looking for a home for his big bull elephant, which was becoming increasingly troublesome. Furthermore, it had apparently been responsible for the deaths of two persons during the past year. Confined to his home by illness, the Philadelphia-born showman sent his manager Robert Campbell to the Garden on December 22nd to

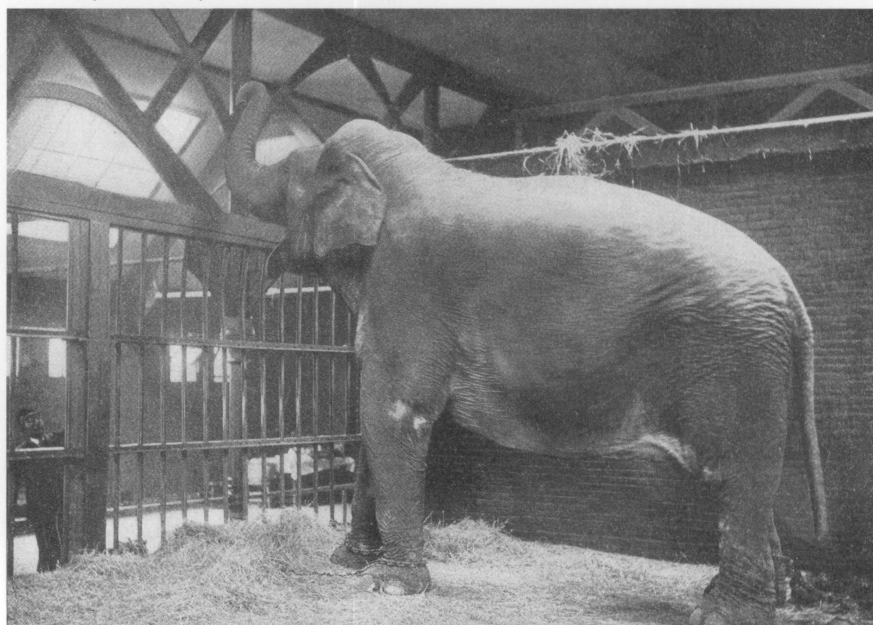
make the offer.

With its pachyderm herd now down to only "Jennie" and the second "Empress," the Zoological Society would be unable to afford to purchase another. They were therefore in no position to look a gift horse—or gift elephant—in the mouth! Standing ten feet in height at the shoulder and weighing in at roughly twelve thousand pounds, "Bolivar" was destined to be the largest elephant ever owned by the Philadelphia Zoo. He would survive at the Garden for two decades, apparently without causing any further mayhem.

The *Times* was on hand on Christmas Day to record Bolivar's arrival. The weather for the occasion was unseasonably warm, almost balmy, the paper describing it as "autumnal and inviting," prompting the turnout of extraordinary crowds which found the new elephant "an irresistible attraction."

## BOLIVAR ENTERS THE ZOO HOW ADAM FOREPAUGH'S BIG CHRISTMAS PRESENT WAS RECEIVED.

No stereographs of Adam Forepaugh's giant elephant and unique "Christmas present" are known to exist and in fact, this image from the Society's Pictures from "the Zoo" souvenir book of 1899 may be the only known photograph of "Bolivar" taken from life, although an image of the animal's mounted skin and skeleton in the city's Academy of Natural Sciences does exist from around the time of World War I.



## ELEPHANTS' CHRISTMAS DINNER

### The Delight of Empress and the Contempt of Jennie for Their New Companion.

Adam Forepaugh's famous elephant Bolivar, the greatest pachydermatous bulk in the realms of civilization, entered the Zoo yesterday morning as the veteran showman's Christmas gift.

Bolivar left his old quarters at Richmond [ie., the city's Port Richmond] at 7 o'clock. He traveled to his new home in great state. Adam Forepaugh, Jr., attended him in a carriage. An aid [sic] rode by his side on horseback carrying a spear. Keeper Johnson, a colored groom and two escorting elephants completed the party.

The strange matutinal excursion caused a sensation in the line of march, even at that early hour. The passage of the Girard Avenue Bridge was made with an escorting contingent of a million small boys. At the entrance of the Zoo the waves of juvenality proved resistless and a flood of sightseers swept on to the elephant house.

Superintendent Brown and Head Keeper Byrne were on hand to receive the huge gift. The head keeper swung back the doors in the rear of the elephant cage and Bolivar's attendants urged him in.

### BOLIVAR'S RECEPTION.

In the cage were the two female pachyderms, Jennie and Empress. Jennie



is 26 years old, and has worn widow's weeds for a number of years. Empress is a maiden of sweet sixteen. The only lover she ever had was the youthful Dom Pedro, whose lamentable death happened two years ago.

At Bolivar's intrusion Jennie, with matronly rage, trumpeted and then struck the prince of pachyderms a remonstrating whack with her trunk. Empress looked on shyly. At the sight of the two female occupants of the room Bolivar modestly withdrew. For some time Head Keeper Byrne and Bolivar's trainer labored in vain to induce him to reenter the apartment. A bright idea occurred to Byrne. He chained the expostulating female elephants to opposite corners of the room. Then Bolivar entered.

Although Jennie sulked in her corner all the morning, the innocent young Empress expressed the greatest delight for her new companion. She caressed him all day. He soon appeared to be perfectly at home.

Old Pete, the ugly thirty-six-year-old rhinoceros next door, was the only one who, as the day went on, refused to become reconciled to the new arrival. His jealousy was excited, explained Head Keeper Byrne, because he feared that he wouldn't get his usual holiday supply of peanuts. For hours, snorting with rage, he hurled himself against the brick partition separating him from the obnoxious newcomer.

## BOLIVAR'S CHRISTMAS DINNER.

At about noon Charles Johnson, who has been Bolivar's keeper for many years, and Keeper Pendergrast of the Zoo, served Bolivar and his new room mates with an elaborate Christmas dinner. Bolivar ate a barrel of cabbage, two bushels of potatoes, which he crushed under his feet and then mixed with hay, forming a sandwich loved by all healthy elephants, a peck of onions, twenty-five loaves of bread, a bushel of carrots and half a bushel of bran mush. He washed this down with sixty gallons of water and then used two hundred pounds of hay to pick his teeth.

Before entering the house he weighed only about three hundred pounds less than five tons. Head Keeper Byrne said that when he had been at the Zoo a few weeks two tons would be added to his weight.

During the day the peanut basket in the elephant house, holding three bushels, was filled six times for Bolivar's insatiate maw. The keepers said that Bolivar would be dieted today in order to give his deranged digestive organs a chance to heal.

## VALUE OF THE GIFT.

Bolivar is 26 years old. He is the largest elephant in captivity and is still growing. He is ten feet high and he is heavier than Jumbo was. Adam Forepaugh, Jr., said yesterday that his father, as a Philadelphian, wished to present something to the

Zoo that couldn't be excelled. He thought he had done it.

But there was more to this story than meets the eye. Forepaugh was looking for a safe way to dispose of the elephant, other than the unpalatable alternative of destroying the big animal. There was good reason for his concern. Many years later, upon the death of "Bolivar," the *North American* recalled:

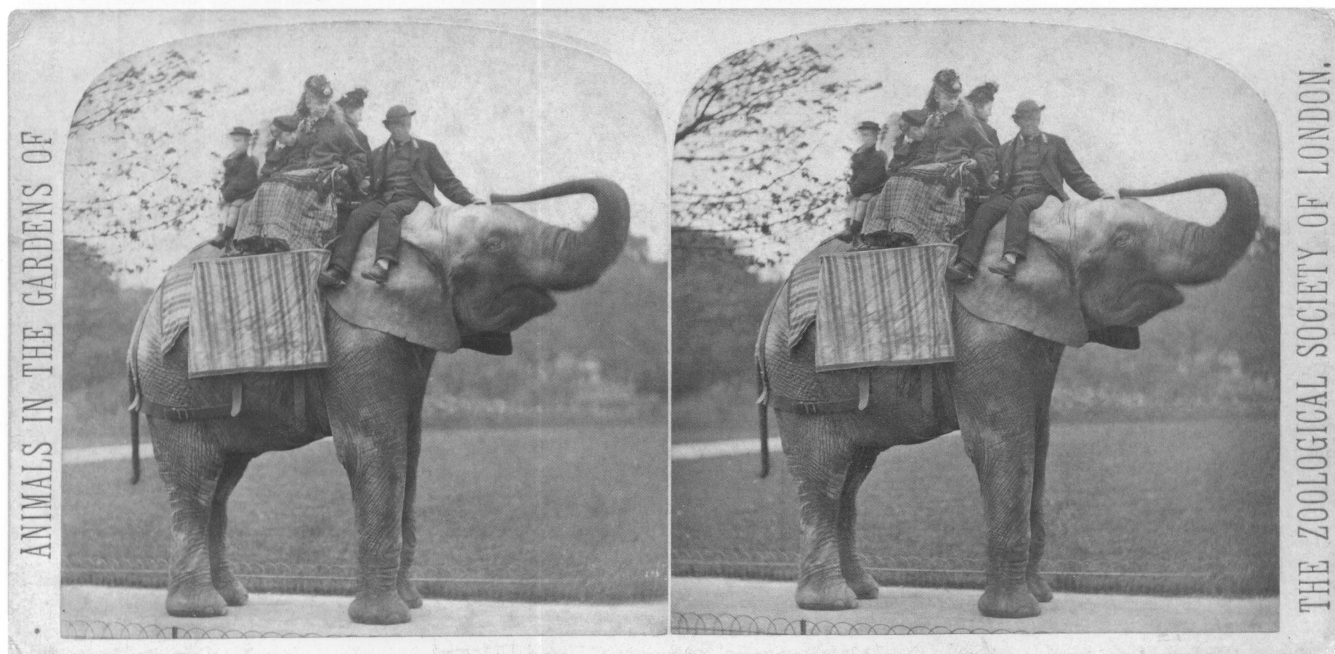
The rule among elephants is that the bigger the animal is the better its temper. But Bolivar was an exception to this rule. It is certain that he had never killed any one before he came to America, for once an elephant kills a man he will kill another at the first opportunity offered.

## KILLED PRACTICAL JOKER.

For an elephant who had not reached what is known as the "musth" period, when he becomes dangerous, Bolivar had an unusually vicious temper. The veteran showman had him for nine years before he became murderous. In the spring of 1888 he killed a man who was tantalizing him with the lighted end of a cigar.

Accustomed to stretching forth his trunk to take peanuts and candy from persons visiting the circus, Bolivar touched the hot end of the cigar. Of course, he refused a second proffer, and the unfortunate man, in his eagerness to again burn the big fellow's trunk, approached too close. The curling tip of the great trunk seized him, and an instant later the mighty foot of Bolivar had crushed the man's head out of all human semblance.<sup>4</sup>

Frederick York No. 181, "African Elephant (male)." Forepaugh's acquisition of "Bolivar" was apparently a response to P.T. Barnum's purchase of the giant African elephant "Jumbo" from the London Zoo in 1882. York stereographed "Jumbo" with keeper Matthew Scott at the Zoo's Regent's Park Garden circa 1872. Ironically, "Jumbo" would be killed by a locomotive of Canada's Grand Trunk Railway in 1885.



It was only a question of time before he would claim another victim, and he did. Ordinarily, showmen regard death as the only safety from a "bad" elephant, and almost any other showman would have condemned him. But Adam Forepaugh was very proud of Bolivar and wanted him to be seen in real captivity, where his enormous and symmetrical proportions might be viewed in safety by his townsmen of this city.

Thereupon, Eph Thompson was put in charge. He had nothing to do but to watch Bolivar until the show returned to this city to its winter quarters at the eastern end of Lehigh avenue. Arriving there, Forepaugh sent Bolivar in heavy chains to the Zoo, where he remained a prisoner for twenty years.

Curiously, the paper made no further mention of the second fatal incident, although a separate tradition holds that the elephant had crushed to death a young boy who was attempting to sneak into the circus without paying the required entrance fee by crawling under the edge of the canvas tent. This supposedly happened in Boston—although I find it hard to believe that, even in the nineteenth century, any such unprovoked attack on a child, regardless of circumstances, could have resulted in anything less than the immediate termination of the offending animal.

"Bolivar" was not just a man-killer but a lion-killer as well. Back in December of 1885, while the circus was laying over at its winter

quarters at Lehigh Avenue and Edgemont St., a lion named "Prince" broke out of its cage and attacked the elephant—although one might wonder whether the big cat was really so unwise or simply seeking to escape. In any event, "Bolivar" felled the lion with a blow from his trunk, then completed the job by trampling the offending animal into the ground.

So the Zoo had its new goliath. "Bolivar" was now the Society's problem. For Forepaugh, the "Christmas gift" idea was a wonderful public relations stunt to drum up publicity. Yet, the legendary showman would have little time to enjoy such benefits.

Already ill at the time of the big pachyderm's departure, Forepaugh would die on January 20th, 1890, less than thirteen months after presenting "Bolivar" to the Zoo.

No stereographs of "Bolivar" are known to exist, although he does appear in a single photograph from a souvenir booklet published by the Zoo in 1899.

Despite the big elephant's prior criminal record, and perhaps to some extent because of it, "Bolivar" remained a popular attraction at the Zoo and often attracted

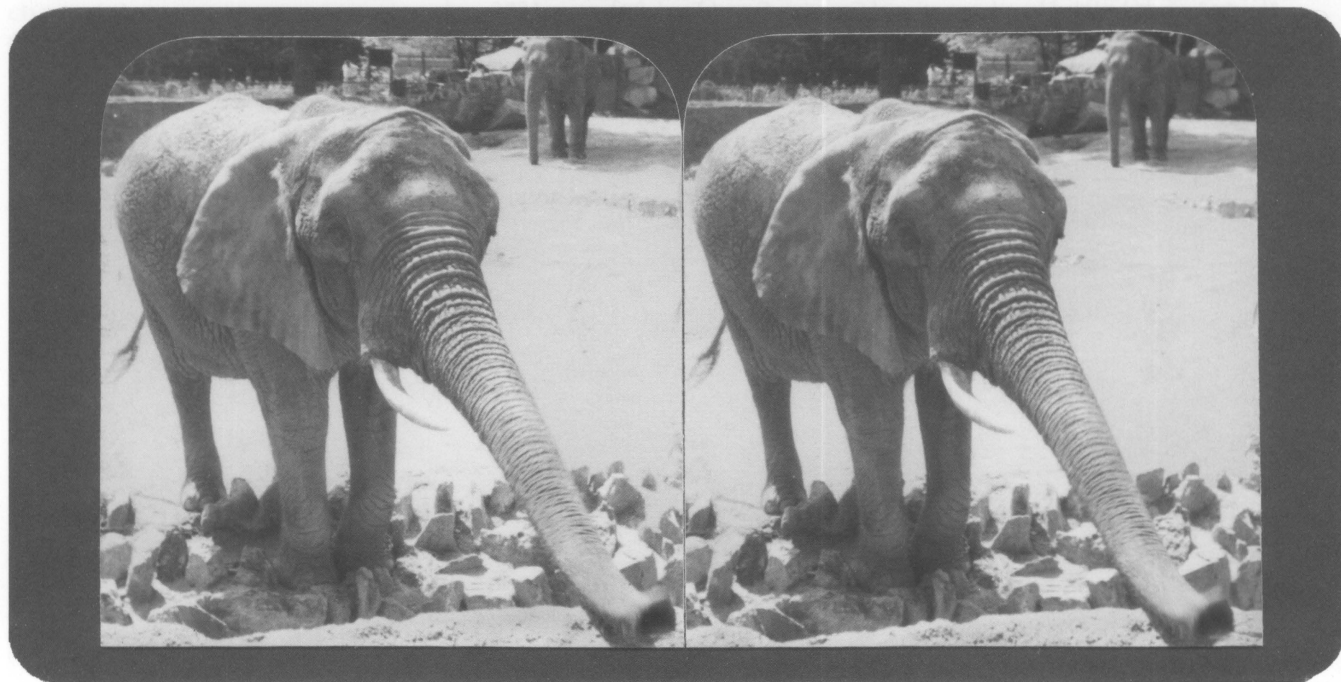
media attention. Some years later, he was at the center of a curious incident that may shed some light on a popular animal myth.

The reference is of course to that old wives' tale of elephants being afraid of mice.<sup>5</sup> Could there possibly be any truth to *that*? You wouldn't think so, but consider the following from the *Times*, which happened at the zoo in 1893.

One night less than a week ago, when darkness covered everything and all the specimens except those of nocturnal habits were asleep, there arose a great disturbance among the elephants. Trumplings loud and shrill smote on the air, mingling with such a clanking of chains and rustling of straw that the watchmen came hurrying from every part of the grounds filled with alarm. Arriving on the scene, the animals were discovered presenting every evidence of extreme terror, their huge bodies trembling and their trunks grasping the straw—except, indeed, Bolivar, who had rolled his nasal appendage up out of harm's way and was clutching his chain in an agitated manner. Investigation failed to reveal the cause of the trouble, but when it was abandoned the same discordant noise, accompanied by the same demonstration, was resumed more energetically than ever, and it was at last discovered that a small, half-grown opossum had

*When the female African elephant "Petal," the Philadelphia Zoo's last surviving proboscidian, succumbed at the Zoological Garden in June of 2008, it brought to an end an unbroken chain of the great pachyderms that had existed there for more than a century and a third. "Petal" is seen here begging for peanuts in 1982, producing a "through-the-window" effect that perhaps should have been, uh, "truncated."*

*(Stereo by the author.)*





found its way into the building, and that its fearless gambols round the mammoth beasts had thus terrified them. Oddly enough, powerful as they are, elephants are so timid that a mouse will make them lose composure. Out at the Zoo the little rodents are so numerous that they are accustomed to them, but the opossum, being strange to them, probably suggested all sorts of vague terrors.

So, the keepers did believe the story about elephants and mice, and the *Times* account does provide some documentation of actual behavior to suggest a certain degree of corroboration for it. But elephants afraid of mice? Really!

But what if it isn't the *mice* per se that the elephants find so disturbing? Given that virtually all captive elephants in the Western world at the time were born in the wild (the exact antithesis of what we find today), they would thus have been exposed in at least a limited degree to a "herd mentality." Furthermore, given the elephant's somewhat indifferent eyesight, might there be another explanation? What the elephant may perceive is nothing more than a small dark *something* moving through and rustling the grass. What else moves in such a "snake in the grass" way? In all probability, just that—a snake in the grass. And even if you *are* an elephant, no matter whether you're from India or Africa, a cobra is a *really* bad thing—especially if you happen to be confined (let alone chained) in a small area and can't avoid it! Note too that "Bolivar," the only elephant so chained, is reported as having coiled his trunk, a tempting and vulnerable potential target for any serpentine strike, up and "out of harms way." Given the highly inquisitive nature of young elephants, such inadvertent encounters no doubt occur in the wild from time to time, and there have long been reports of such juveniles dying of snake bites. So maybe there is some truth to that old wives' tale, after all.

Ten years after "Bolivar" arrived, in January of 1898, "Jennie" succumbed to what was vaguely termed "complications of diseases." In poor health for some time, the perennial favorite had suffered from rheumatic attacks for years.

Oddly enough, the Zoo's archives still retain a wallet made from her soft, almost pebbly hide! One wonders what was the purpose behind such an unusual artifact.

Two years later, when the young Winston Churchill made his first lecture tour of America, the acclaimed Boer War hero and newly elected member of Parliament made his first speech in Philadelphia, despite the fact that he was at the time staying in New York—where he found time to visit with then Vice-President-elect Theodore Roosevelt. Churchill was suitably impressed, but T.R. found his young visitor a bit overwhelming, too full of himself. But then Roosevelt never liked to share the spotlight with anybody.

In any event, Churchill's Philadelphia speech was well-received, despite the audience's largely pro-Boer sympathies. While "Young Winston" undoubtedly knew of his parents' visit to the Quaker city a quarter of a century before, he had no time for Zoological Gardens, so it is unlikely he ever heard of the remarkable elephant that may have been named for his mother. Too bad. One won-

*A youthful Winston Churchill, photographed early in his political career, shortly after his 1900 American speaking debut in Philadelphia. Churchill was probably unaware of the link between his mother and the city's famous elephant.*

*(Cabinet card by Reginald Haines of London)*



ders what he would have thought of that.

For Churchill, riding on elephants was old hat. It was something he had done often, during his early Army career in India. Curiously, it was an experience he and the Zoo's "Jennie" had had in common—although from very different points of view! It was after all simply a matter of one's perspective.

## Notes

1. The "First Zoo" claim is disputed by New Yorkers. The present Central Park Zoo was established in the mid-1860s as one of several smaller and less formal "menageries." Although it eventually grew into a true zoo, at this time it served largely as a residence for circus animals during the winter season and as a way station for animal importers. Some of its animals were in fact *owned* by the Philadelphia Zoo! By contrast, the Philadelphia Zoological Garden from the first had exhibited all the hallmarks of the finest European zoos. It all comes down to how you define the question.
2. Alternatively, the offending locomotive may actually have been *inside* the Zoo, for a construction spur track for the new Girard Avenue Bridge (which would open on July 4th) ran *through* the Garden. In any event, the train might not have been entirely to blame, for the Australian Collection had apparently only arrived that very morning and the unfortunate kangaroo was no doubt already disconcerted by the large crowds and unfamiliar surroundings.
3. Curiously, in an undated letter to Randolph in 1877, one year after the Philadelphia visit, Jennie described buying two-and-a-half-year-old Winston one of his first toys: "I bought Winston an elephant this afternoon which he has been asking me for some time, & I was on the point of saying to the shop woman 'an ephalant.' I just stopped myself in time." One wonders whether to read any significance onto this curious little episode. What prompted Winston to want an "ephalant," clearly one of the first complex words he learned to pronounce—or rather mispronounce?
4. As they say, smoking can kill you. Evidently being a *total idiot* will get the job done just as well! Note that this incident occurred but a few short months before the showman so "generously" presented the animal to the Zoological Garden.
5. Actually, the supposition of elephants' aversion to mice goes all the way back to Pliny the Elder, the famed Roman naturalist and admiral whose fascination with natural phenomena led him to observe the eruption of Vesuvius that destroyed Pompeii in 79 A.D. from too close a proximity—one occasion on which curiosity killed more than just the cat! 🐱

# Lumiere 3-D Technology Awards

by David Starkman

On October 19, 2010, Susan Pinsky and I had the pleasure of attending the International 3D Society 2010 3D Technology Awards ceremonies at the Grauman's Chinese Theater complex in Hollywood.

The International 3D Society has been founded to advance the art and technologies of stereoscopic 3-D content and its professional innovators. It hosts educational opportunities for showcasing work, recognizing achievement and advancing member growth. The Society is open to individuals and organizations active in moving 3-D media to new creative achievement and consumer support. The award that they created is called the "Lumiere Award", and is made by the same company that makes the Oscar® statue award for the Academy of Motion Picture Arts and Sciences.

Unlike the Creative Awards (SW Vol. 35 No. 6 page 30), which were given out in February of 2010, for best achievements in 3-D film making, the Technology Awards acknowledge the people and companies who are creating equipment and software to make high quality digital 3-D filming both easier and better than it has ever been before.

## 2010 3D Technology Awards Recipients

**GOLD AWARD:** Robert Bernier for his "Optics" technology.

**GOLD AWARD:** IMAX for "Dual 16/65mm & 30perf single-strip 65mm 3D cameras" (Leo Baljet, Colin Gardiner, James Neihouse John Shaw, William Shaw).

**GOLD AWARD:** Iridas for "Dualstream" technology (Michael Gallo, Lin S. Kayser, Michal Krcmar).

**GOLD AWARD:** MSM Design for "Dual 16/65mm & 30perf single-strip 65mm 3D camera" (Gordon Gruel, Barbara Mueller, Martin Mueller, William Nixon, John Stafford).

**CENTURY AWARD:** IMAX for "Solido Systems" (Ken Baker, Michael Dean, Gord Harris, Michael Hendriks, Phil Insull, Brian Neale, Mehran Omidvar, William Shaw).

**CENTURY AWARD:** RealD for "Cinema system"

**CENTURY AWARD:** Texas Instruments for "DLP Cinema."

**WHEATSTONE AWARD:** Panasonic.

**LIFETIME ACHIEVEMENT AWARD:** Chris Condon of StereoVision International.

3ality Digital for "Stereo Image Processor" (SIP) (Martin Beck, Martin Borchert, Matthias Lenz, Howard Postley, Steve Schklair).

Autodesk for "Maya" 3-D visual effects software technology (Dan Pressman, Jason Walter, Martin Werner).

Dolby Laboratories for "Dolby 3D" system" (Wilson Allen, Gary Gomes, Marty Richards, Dave Schnuelle).

Steve Hines & The Walt Disney Studios for "Disney Dual-Camera 3D Rig."

In-Three for "Dimensionalization®" technology (Neil Feldman).

Masterimage 3D for "Digital 3D Cinema System" (Younghoon Lee, Yongbi Jun).

Nvidia for "3D Vision™" technology (David Cook, Frank Fox, Gerrit Slavenburg).

Quanrel for "Pablo" 3-D color correction and finishing system (Simon Rogers, David Throup).

Sassoon Film Design for "2D TO 3D Conversion" technology (Tim Sassoon).

Sony Pictures Imageworks for "3D Pipeline" (Alan Davidson, Rob Engle, Dan Lake, Peter Palombi, Mylene Pepe, J. Robert Ray).

The Walt Disney Studios for "3D Pipeline" (Evan Goldberg, Andrew Hendrickson, James Hurrell, Joseph Longson, Phil McNally, Robert Neuman, Paul Allen Newell, Matthew Schnittker).

XpanD for "Active 3D Cinema System" (Boyd McNaughton).

After a one hour reception, the ceremonies began with a short 3-D film clip. This was a superb quality presentation of Chinese dancers in colorful traditional looking costumes, presenting a highly synchronized dance routine. The dancers were lined up so precisely that the dance began with what looked like a single dancer, but quickly expanded as the dozen or so dancers, behind the front one, had arms that emerged in waves and levels going behind the first dancer. Then one by one the dancers emerged fully, in expanding and merging patterns, which would not have been nearly as impressive without the superb 3-D

### ARCHIVAL SLEEVES: clear 2.5-mil Polypropylene

NEW CDV (2 3/4" X 4 3/8")	per 100:	\$9	case of 1000:	\$85
CDV POLYESTER 3-mil 3 3/8" X 4 3/8"	per 100:	\$15	case of 1000:	\$140
POSTCARD (3 3/4" X 5 3/4")	per 100:	\$10	case of 1000:	\$90
4" x 5"	per 100:	\$11	case of 1000:	\$90
STEREO / #6 3/4 COVER (3 3/4" x 7")	per 100:	\$11	case of 1000:	\$100
STEREO POLYESTER (3-mil)	per 100:	\$24	case of 1000:	\$230
CABINET / CONTINENTAL (4 3/8" X 7")	per 100:	\$12	case of 1000:	\$110
#10 COVER / BROCHURE (4 3/8" x 9 5/8")	per 50:	\$12	case of 500:	\$110
5" x 7"	per 50:	\$10	case of 200:	\$35
BOUDOIR (5 1/2" X 8 1/2")	per 25:	\$9	case of 500:	\$110
8" x 10"	per 25:	\$10	case of 200:	\$65
10" x 14" MUSEUM BOX SIZE	per 10:	\$11	case of 100:	\$85
11" x 14"	per 10:	\$10	case of 100:	\$70
16" x 20"	per 10:	\$24	case of 100:	\$160

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cinematography of the routines. It ended to a rounding applause, and at the end credits we learned that this was part of a 11 minute 3-D film called *My Dream*, shot only a few weeks earlier in Korea. It is a Coproduction of Hwy3D, China Disabled Performance Troupe and Korean Film Council. Directed by Joy Park, Executive Stereoscopic Producer: Ray Zone, Stereographer: Jeff Amaral, and 3ality camera rig operator: Scott Ressler. Ray, Jeff, and Scott are all members of the Stereo Club of Southern California. (See SW Vol. 36 No. 3 page 39.)

Susan and I were pleased to see our friend, and former employer (when we worked at Stereovision International) Chris Condon, honored with the first Lifetime Achievement Technology Award from the I3DS. A clip from his famous 1969 3-D financial hit, *The Stewardesses* was shown.

Sadly, Chris, whose work in 3-D filming spans 50 years, was unable to attend due to health issues, but presenter Lenny Lipton of Oculus 3D, said the award would be taken to him Wednesday at his hospital room in Burbank.

We were pleased to see NSA Board Member Ray Zone introduced as the Society's "3-D Historian". To that end, Ray came to the lectern, and introduced two historical film clips. The first, the Lumiere Brothers 1895 "Arrival of a Train". Though not 3-D, the story is that when this was first publicly shown in 1896, some people in the audience leapt out of their seats, to get out of the way, as seeing a moving image of a train heading straight for the audience was a new experience. Ray

explained that while there were rumors that this was shot in 3-D, in reality the Lumiere Brothers shot a very similar experimental 3-D film in 1935. We were then showed this film clip in 3-D. It was gratifying to see that the I3DS wants to acknowledge the history of 3-D cinema that has led the medium to it's current state.

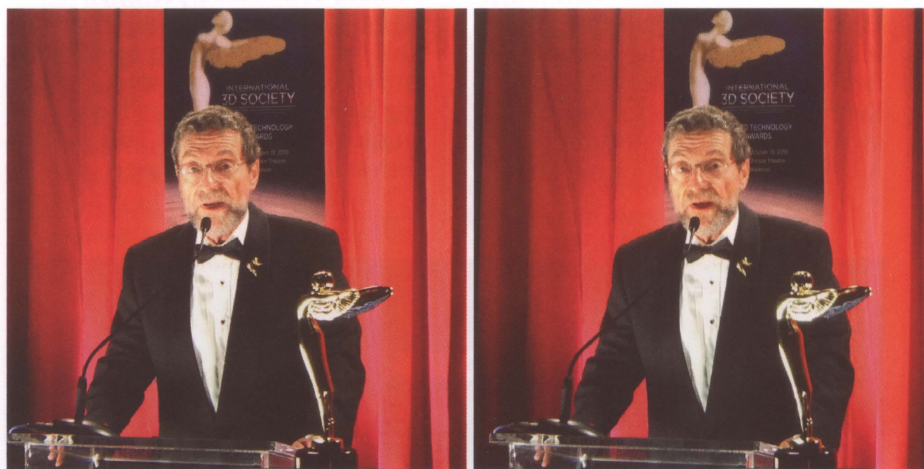
A highlight of the program for us was a work-in-progress, four-minute clip presented by Susan Lloyd from her grandfather Harold Lloyd's classic silent black-and-white film "Safety Last," in which there is the famous scene showing Lloyd hanging several stories high from a giant clock over a busy downtown Los Angeles street. The original clip of this scene was shown, followed by a colorized and 3-D version that was amazingly good in it's stereoscopic depth. Apparently a part of this film is being converted to 3D and colorized by Legend 3D and founder Barry Sandrew, who invented digi-

tal colorization. Even though the clip looked excellent, we have read that Sandrew told 3DHollywood.net that it is still being improved, and the final version will be shown at the second annual International 3D Society Awards honoring creative arts on Feb. 9, 2011. He also said that there are no plans to convert the entire film. We hope that the Lloyd estate may change it's mind about this once the final test is complete. This may prove that even a classic silent film may have a new life thanks to high quality 3-D conversion.

With a lot of the Hollywood community still on the fence about whether this current popularity of 3-D cinema and 3-D television is here to stay, the International 3D Society seems to be filling a role within that community to educate the professionals in this field and ensure that 3-D is taken seriously to become a permanent creative option for modern filmmakers. 📽

Technology Award presenter Lenny Lipton, President of Oculus 3D.

(Stereo by Susan Pinskly and David Starkman)



Ray Zone with Joshua Greer, President, RealD.

(Stereo by Susan Pinskly and David Starkman)





# Making Digital Slide Shows into 3-D Videos

by John Hart, Boulder, CO

When stereoscopic digital projection became practical around the year 2000, many innovative 3-D slide shows were made using editing programs like ProShow, Pics-to-Exe, and Wings. These programs allow you to sequence a set of stereoscopic side-by-side images, or individual lefts and rights, while applying interesting transitions between the slides and synchronizing to a soundtrack. One can also use such programs to add so-called “Ken Burns Effect” zooms and pans of still images in the manner made famous (but not discovered) by Ken Burns, the director of many award-winning 2-D documentaries. A common method for making

3-D slide shows is to output “executable” or .exe files. These are self-contained objects, which, when launched, play the wide-eye slides in order, along with the audio.

For reasons outlined below this technique of making slide shows into executable files is undesirable. A better approach is to render them to independent left and right video files. It is now feasible to both render and play HD (high definition, 1920x1080 per side) stereoscopic videos using inexpensive or free software on reasonably priced computer hardware. Producing slide shows this way has numerous advantages! This short article illustrates how users of

ProShow and Pics-to-Exe can render their slide sequences into high-quality videos. The methodology for other programs is quite similar to the simple steps outlined here for these PC-oriented programs.

## The Perils of Executables

There are many reasons to avoid executables. Three major ones are:

1. They are a projectionist's (or unfamiliar user's) nightmare, requiring special aspect-ratio and resolution settings. The projectionist will also usually lose control over the playback after the executable is launched.
2. They are *not* a universal format. It is nearly impossible to convert them to anything else from their native side-by-side render, which will only play as such in 3-D on a single wide-eyed (or cross-eye) screen, or on a dual-screen or dual projector setup. If you want to display your work

Fig 1. ProShow Video Output Box.

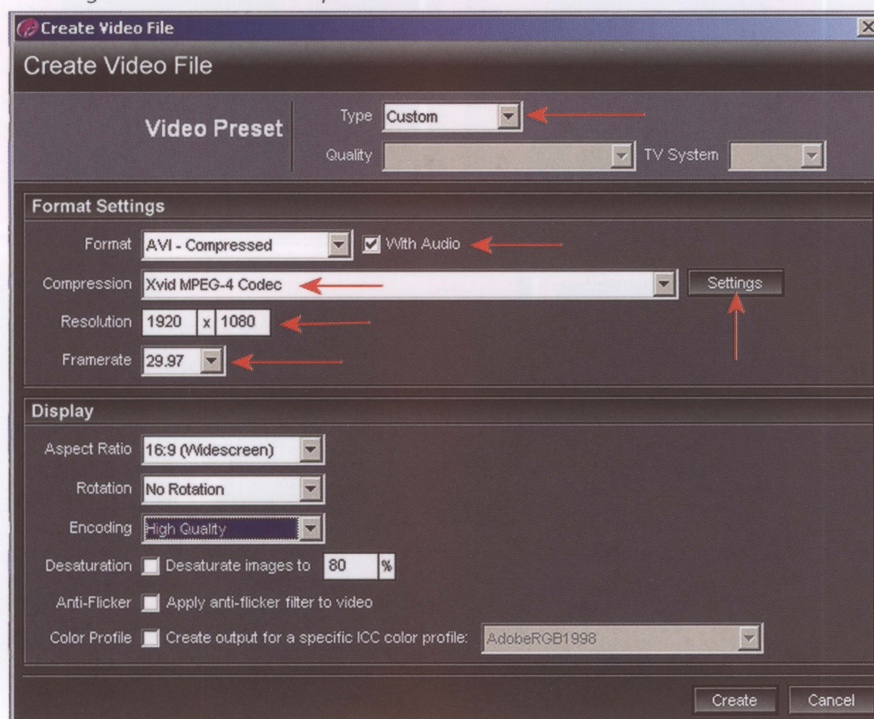
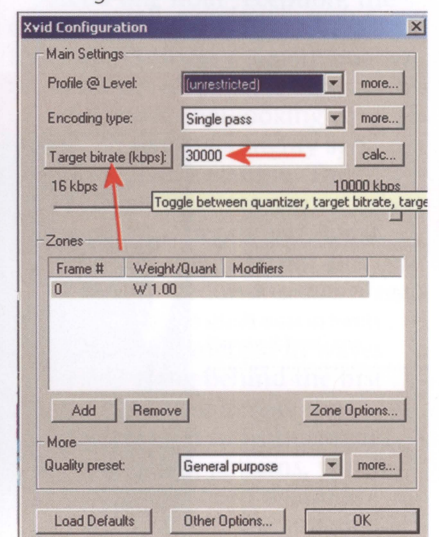


Fig 2. XVID Control Panel.





on most modern 3-D TVs, or on a page-flipped shutter-glass or row-interlaced computer monitor, amongst many examples, you cannot do it with an .exe slide show file. If you want to send your slide show to YouTube3D or Vimeo, forget it.

3. Executables often skip and judder at HD resolution. This occurs because the "Presenter" sub-program embedded in the executable has to calculate all the transitions in real-time during the playback. The "Presenters" are not optimized for multi-core hyper-threading, and just can't keep up, especially if there are a lot of complex transitions and Ken Burns Effects running together. The show will stop and jerk, or perhaps flicker badly.

## The Advantages of a Slide Show as a Video

1. Videos can be played using essentially free software that automatically reformats the input stream to one of a myriad of possible output formats, including various anaglyphs, cross-eye, side-by-side, over-under, checkerboard, row interlaced, page-flipped, etc. Thus, your slide show can easily be made to play on just about *any* display device! Video-player software is much more projectionist-friendly than executables. The projectionist can pause, stop, rewind, or make other alterations during the play.
2. Videos are universal, in the sense that they can be played in, and converted to, various stereoscopic formats.
3. Videos can play smoothly at high resolution, using a modest (by today's standards) "Player Computer". This is because good "Codecs" (video compression encoder-decoders) are, as opposed to "Presenters", multi-threaded. Instead of calculating a lot of complex transitions in a single core in real-time, the Codec's main task is to decompress to individual video frames, a repetitive computation that is easily and effectively optimized for hyper-thread multi-core computers.

## Prepare Your Slide show

It is best to keep left (L) and right (R) images separate! That is, don't use side-by-side or cross-eye pairs in preparing your slide show. Keeping the L and R images split permits easy scripting of Ken Burns Effects and arbitrary slide-to-slide transitions, and makes the video files that will be output from ProShow or Pics-to-Exe half as big. Use your favorite program, like StereoPhotoMaker (SPM), to correct alignments and set the stereo window for your images, but save the results as a set of L-R pairs in two folders: Left and Right. Within said folders, strip off any L/R designation (using the File Rename utility in SPM, for example) so that each side of an image pair has exactly the same name inside its respective folder (e.g. a name like image34.tif is in both the L and R folders, not image34\_L.tif in one and image34\_R.tif in the other).

To create your show, rename the Left folder as "Images", and using ProShow ([www.photodex.com](http://www.photodex.com)) or Pics-to-Exe ([www.wnsoft.com](http://www.wnsoft.com)) insert pictures from this "Images" folder into your time line. You won't be able to preview in stereo, but you can do arbitrary transitions, as well as zooms and pans and such, knowing that in the end they will work fine in 3-D. You should try to get the Left transitions (dissolves, barn-doors, wipes, etc.), Ken Burns Effects (zooms, pans, scrolls, rotations), and the sound-sync, into nearly final form. Save the show script, (i.e. the project file) as "ShowLeft" (say). Close ProShow (or Pics-to-Exe).

Make a copy of your project file ShowLeft, and rename it ShowRight. Rename your "Images" folder (that currently contains the left images) back to "Left", and then rename your "Right" image folder "Images". Thus the "Images"

folder now contains your right image set.

Restart ProShow (or PtoE), and open the project file ShowRight. ShowRight is currently just the Left script but it now has been tricked into loading the right pictures from the Images folder.

At this point you can go through and change the windowing. For example, to move image 10 forward, pan it left a bit. To move it backward, pan it right a bit. A 3% right pan of the right image will push it back, approximately, from the window to infinity on a typical big-screen 3-D TV. Don't change any timings or transitions, because we want the left and right videos to time out and be choreographed identically. Save any changes made back to ShowRight.

If you already have a side-by-side (SxS) slide show script (perhaps used previously to make an executable), you can repeat the above procedure starting off with this SxS script as the ShowLeft project file. Let us assume the SxS script got its parallel pair images from a folder called SXS. Just rename your Left folder, which

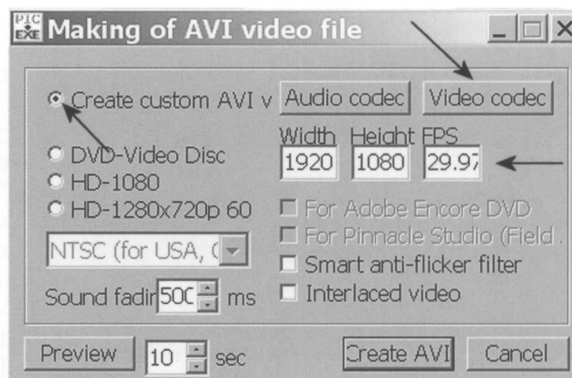


Fig 3. Pics-to-Exe Video Output Box.

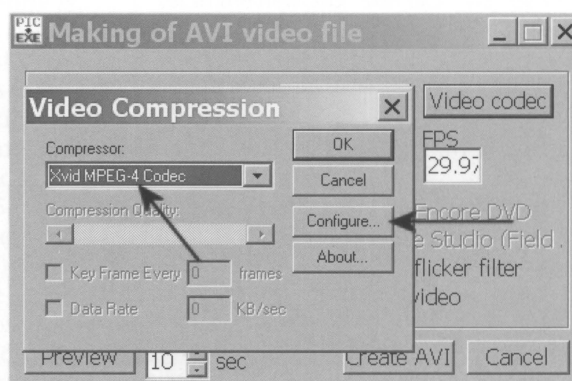


Fig 4. Pics-to-Exe Codec Box.

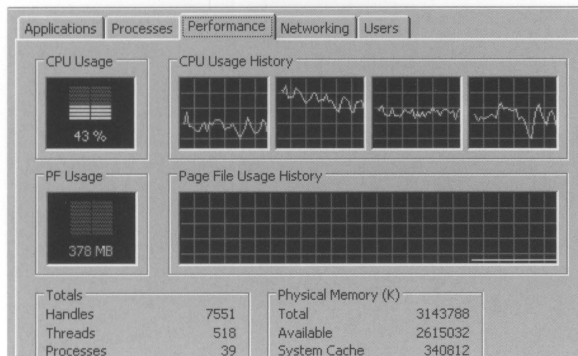


Fig 5. Dual HD 40Mbps XVID Slideshow Video on Quadcore.

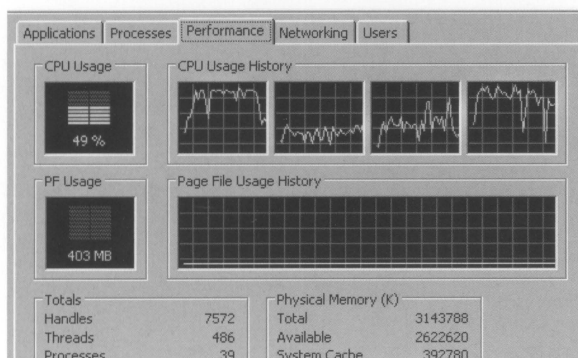


Fig 6. Dual HD 40Mbps XVID ActionVideo on Quadcore.

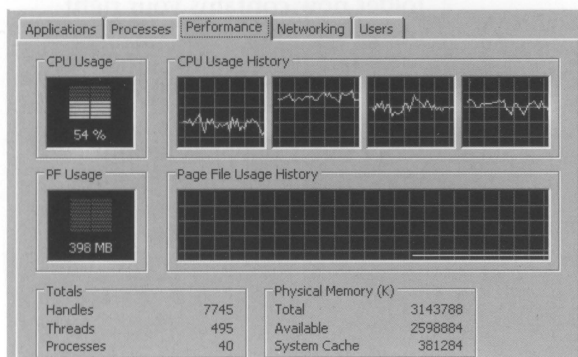


Fig.7. Dual HD 25Mbps XVID ActionVideo on Quadcore.

contains the left sides of all the pairs in SXS (with the same file-names), with the name of the SXS folder you originally used ("SXS"). Now open your original side-by-side project script in ProShow or PtoE. It should load all the Left images, retaining the timings you originally had. You may need to reset the image aspect ratio in Show Options to match that of the single-side images. Make your Left video (as described below) and close the program. Rename the SXS folder back to Left, and then rename the Right folder SXS. Restart the program and reload

your original SxS script, which now opens with the right images in it. Make your right video.

## Render to Video Instead of Exe

When your show script is ready, output it to a video. You will want low resolution preview videos (for a quick look at transitions and such in 3-D), and a final full-resolution video for projection or 3-D TV. When making a video, I suggest 1920x1080 (or the highest resolution display you will use) for the final, and something like 800x450 or 640x360 for previewing.

The second thing in making videos is choosing and setting up a "Codec" for data compression. Video must be compressed in order to generate manageable file sizes and realizable transfer rates. For example, a 1000 second HD stereoscopic video contains about 360 gigabytes of raw data. Disc drives cannot transfer the requisite 360 megabytes-per-second during playback. Whatever codec you use should be readily available to users and projectionists, be

multi-core, efficient, and produce high-quality output. My two favorites are h264 and XVID. Both are MPEG-4 based, but XVID is more easily implemented on PCs running programs like ProShow and PtoE. Thus, you will want to download and install the ~600 kilobyte XVID codec from [www.xvid.org](http://www.xvid.org). It's not a bad idea to include the codec install file with any distribution of your videos to PC users.

With respect to Codecs, we need to select a setting for the "target bit-rate". This specifies, approxi-

mately, the video's data rate. Very high bit-rates yield the best-quality images, but may be difficult to play smoothly and can create overly large files. Low bit-rate videos are easier to play without skipping, and are smaller (for internet downloading, say). However, the image quality may not be acceptable for our final version destined, perhaps, for big-screen projection. Since full high-def HD (1920x1080) is now the standard for TV display and projection, it is useful to note that the very best commercial Blu-ray 2-D discs, like the exquisitely beautiful film Baraka, are encoded at a maximum of 40 megabits-per-second (Mbps). Most 2-D Blu-ray movies you rent are typically 25Mbps. 3-D Blu-rays have a maximum data rate of 60 Mbps (total, for both sides). Therefore, I suggest you encode your final HD videos at 40Mbps per side. This is 5Mbytes/second, per side, which does not bog down a hard-disk during playback. A 15 minute 3-D video will be about 9 Gigabytes, or about 2 DVD's worth. For your previews at 640x360, 5Mbps is adequate.

Both ProShow and Pics-to-Exe have video output options. I have found that you need the Producer version of ProShow to create high-quality video. The Gold version just won't cut it.

In ProShow, once the Left (or Right) show is loaded and completed, on the top toolbar select Create, then Video File. Figure 1 shows the Video Format box for ProShow. Set: AVI Compressed (with audio), XVID MPEG-4 Codec (if it's not in the scroll list for Compression, XVID has not been installed), 1920 x 1080 (or your biggest display resolution) for the final, 640x360 or so for the preview, and 30 frames per second (29.97 if your show contains sound synced to NTSC video, 24 if you want eventually to make 3-D Blu-rays).

Now click the setting button for the compression. Figure 2 shows the Settings box for XVID.

Here, click on the target box until it allows you to enter the "target bit rate (kbps)". Now go into the box to the right and edit in 40000 (40 Mbps) for the final version, or ~5000 for a preview. Hit OK. Back at the Format Box hit



CREATE and save your output file as Output\_L.avi or Output\_R.avi (say).

In Pics-to-Exe the process is similar. Once either the L or R sides of your 3-D show are final in the time line, go to the top toolbar and choose Create, then scroll down to AVI File. This should open the video output panel as shown in Figure 3. Make selections for Custom, Size, and Frame Rate as for ProShow. Then click Video Codec. Figure 4 shows the P-to-E codec box. Again choose XVID from the list (assuming it is installed) and hit configure, which brings up the XVID settings box as in Figure 2. OK your way back to the video output box of Figure 3 and hit Create AVI.

## Play the Video

You will need some software to play the resulting left and right .avi movies in stereo, although Windows Media Player can give you a quick look at either the L or R sides. Stereoscopic Player ([www.3dtv.at](http://www.3dtv.at)) and StereoMoviePlayer (<http://stereo.jpn.org/eng/stvply/index.html>) are great playback programs. To see your preview video, go to File at the top toolbar. Open Left and Right Files/Movies. For Stereoscopic Player, go to View and choose your Viewing Option. For the preview you might want to try side-by-side right-image-first (which will give you a cross-view). I find anaglyph previews great for checking window violations and deviation budgets. For MoviePlayer the output format is selected using the Stereo button on its top toolbar. You can stream your final video out to dual projectors if you use a horizontal span across two "monitors" in your graphics card settings and enable dual monitor output (via View in Stereoscopic Player). Useful keystrokes (like Enter or Alt-Enter for full-screen, spacebar for pause, etc.) enable you to control the playback.

What is the minimum computing system one needs to play a full-HD (1920x1080x2) slide show video without skipping, de-sync of sound and video, jerkiness, flicker, or other playback artifacts? A quad-core (4-thread) Core2 system with a SATA hard drive should be adequate. For smaller resolution (like 1024 wide, per side) you can

get away with a dual-core desktop PC or even a notebook with a display expander like the Matrox DualHeadToGo.

Fig. 5 shows performance on a 2.83GHz Intel Q9550 Core2Quad with 3GB RAM and a 1TB 7200 SATA drive, while playing a dual HD ProShow slide show having both dissolve transitions and simultaneous pans/zooms/scrolls/rotates. It was encoded with XVID at 40Mbps per side, and played out to two HD monitors using Stereoscopic Player. All cores are active (multi-core = good), and none is over about 80%. The play is smooth and clean. Fig. 6 shows performance for a 40Mbps 3DHD video of whitewater kayaking. Notice that 2 cores are maxed out, and indeed this play jerked and skipped. On the same Q9550, this kayak video plays fine when encoded at 25Mbps (fig. 7). The motions and effects in the slide show are simpler than those in the kayak video, so it runs smoother at a higher bit-rate. Generally, it usually helps if the video files have the same resolution and aspect ratio as the display, so that the Player software does not have to resize everything on the fly.

## Conclusions

In order to make stereo slide shows playable on a variety of display devices, and more robust and more easily managed during high-resolution projection, slide show producers are encouraged to render their programs out to L and R videos. As illustrated above, this is easy to do within existing slide show software like ProShow and Pics-to-Exe. The resulting output will play without skipping and jerking, even at top-quality full-HD resolution. I hope people will give this a try and submit XVID L/R.avi videos to the Stereo Theater at NSA 2011, instead of executable .exe slide shows. It will make my life as the projectionist for this event a whole lot easier! Thanks in advance. ☺☺

## Chris Condon's Deep Legacy

(Continued from page 5)

included Andy Warhol's Factory output from New York, and various 'soft-core' adult titles. *The Stewardesses* would be produced by Sherpix Inc., and its theme would reflect a lifelong fascination with aviation on the part of Condon.

StereoVision publicity materials relate the following story:

While still in production, public interest in the new 3-D "skin flick" was generated when a San Francisco vice squad detective caught an eye-popping glimpse [of *The Stewardesses*] and temporarily shut down the theater. Anxious to exploit their investment, the Centre Theatre management immediately wrote a newspaper ad in protest, stating "We reserve your right to see this film" exploiting the war between "activist" and "establishment" factions in San Francisco during the late 1960s.

Within a few weeks, the film's loosely-related story segments were made into a feature movie and released throughout the 40-screen ATG circuit.

The storyline of *The Stewardesses* is thin enough. A group of young "flight attendants" are shown at work and play during the swinging sixties. The following short plot description from the 2009 DVD release pretty much says it all. "It's 1969, and the skies are really friendly. Experience a day in the life of a group of swinging stewardesses where anything goes—sex, psychedelics... and more sex." Another familiar line also graces the front of the DVD clamshell box: "See the lusty stewardesses leap from the screen onto your lap."

In 1971, Magnavision had been reincorporated as StereoVision International. Building upon the success of *The Stewardesses*, Lou Sher ordered a sequel, *International Stewardesses*, sometimes known as *Supersonic Supergirls*, which was released in 1974. The surprising financial success of *The Stewardesses* represents a triumph of cultural timing. Facilitated by single-strip 3-D projection using only one projector, driven by the countercultural revolution of the 1960s, the novelty of increasingly adult subject matter and the long absence from theater screens of 3-D movies, *The Stewardesses* capitalized on a unique historical moment. ☺☺

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MASTERING 2D TO 3D CONVERSION, *Digital 3D Stereo Guide* and *3D Stereo Magic*. Find these and other great stereo books at [www.enfostore.com](http://www.enfostore.com).

"MESO-AMERICAN RUINS in Stereoscopic Three-Dimension". My new book. For info email [PIXINTL3D@comcast.net](mailto:PIXINTL3D@comcast.net). MODERN PINUP and Nude Realist Stereo Slides. E-mail Randy Ridings at [stereorandy@hotmail.com](mailto:stereorandy@hotmail.com) for details and scans.

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## Wanted

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ALASKA & KLONDIKE stereos needed, especially Muybridge; Maynard; Brodeck; Hunt; Winter & Brown; Continent Stereoscopic. Also buying old Alaska photographs, books, postcards, ephemera, etc. Wood, PO Box 22165, Juneau, AK 99802, (907) 789-8450, [dick@AlaskaWanted.com](mailto:dick@AlaskaWanted.com).

ANY IMAGES of Nevada City or Grass Valley, California. Mautz, 329 Bridge Way, Nevada City, CA 95959, [cmautz@nccn.net](mailto:cmautz@nccn.net).

COLLECT, TRADE, BUY & SELL: 19th Century images (cased, stereo, Cdv, cabinet & large paper) Bill Lee, 8658 Galdiator Way, Sandy, UT 84094. [billleette@juno.com](mailto:billleette@juno.com) Specialties: Western, Locomotives, Photographers, Indians, Mining, J. Carbutt, Expeditions, Ships, Utah and occupational

CORTE-SCOPE VIEWS or sets, any subject or condition. No viewers unless with views. John Waldsmith, 302 Granger Rd., Medina, OH 44256.

FRANKA STEREO VIEWER. Carl DiDonato, 504 West Park Ave., Hamilton, NJ 08610-5712, (609) 888-4184, [carldd1223@aol.com](mailto:carldd1223@aol.com).

FRANZ LISZT STEREOVIEWS. Was told at an NSA convention that there are at least 3 - Sarony? Anthony? Would accept good copies. Would do article for *Stereo World* once I acquired views. Carl DiDonato, 504 West Park Ave., Hamilton, NJ 08610-5712, (609) 888-4184, [carldd1223@aol.com](mailto:carldd1223@aol.com).

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NEUSCHWANSTEIN stereo cards except Keystone's 30054 and V24500T. E-mail price and condition (and scan if possible) to: [hornsth@gte.net](mailto:hornsth@gte.net).

PITTSBURGH (region) and Allegheny City, Pennsylvania. Scenic, city & industrial stereo views. Photographers, Studios, dark tents, photo wagons. Round Kodak photos, interesting daguerreotypes, including jewelry. [ngraver@rochester.rr.com](mailto:ngraver@rochester.rr.com) N.M. Graver, 276 Brooklawn Dr., Rochester NY 14618.

REALIST SLIDES OR STEREOVIEWS of the "Guild Inn" Scarborough, Ontario, Canada, aka "Guild of All Arts", "Guildwood Park", "the Studio" "Ranelagh Park" and "HMCS Bytown II". I know a couple took Realist slides in 1956 and these may be in *your* collection. Actual slides or HQ scans. [timo.puhakka@bellnet.ca](mailto:timo.puhakka@bellnet.ca).

RESEARCH MATERIALS: Images, artifacts, diagrams, etc., both past and present, for use as illustrations in 3D dictionary now under development. See [www.hollywords.org/3D](http://www.hollywords.org/3D) for list of dictionary terms or email [info@hollywords.org](mailto:info@hollywords.org) for more information.

SINGLE VIEWS, or complete sets of "Longfellow's Wayside Inn" done by D. C. Osborn, Artist, Assabet, Mass., Lawrence M. Rochette, 169 Woodland Drive, Marlborough, MA 01752.

STEREO WORLD Volume 4 No.5. Pittsburgh and Allegheny, PA area views. Daguerreotypes, cased images or paper photos, especially from these cities. Daguerreian jewelry. Round Kodak Photos. Graver, 276 Brooklawn Dr, Rochester, NY 14618 [ngraver@rochester.rr.com](mailto:ngraver@rochester.rr.com).

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## Wanted

STEREOS, or scans of views, by Victor Albert Prout needed for research project. Please contact Paula Fleming, [britishstereos@hotmail.com](mailto:britishstereos@hotmail.com)

THE DETROIT Stereographic Society invites you to attend our monthly meetings at the Livonia Senior Center, on the second Wednesdays, September through June. Visit our website [www.Detroit3D.org](http://www.Detroit3D.org) or call Dennis Green at (248) 398-3591.

TIMOTHY O'SULLIVAN stereoviews from the King Survey, Wheeler Survey and Darien Expedition. Would like to correspond with collectors. Highly interested in ANY stereos from the King Survey. Most anything from the Darien Expedition. Wheeler - anything on unusual/uncommon mounts and those published by E & HT Anthony. Also, those on plain unprinted mounts which have captions or notes written in period ink or pencil. Will purchase certain items if for sale, but mainly interested in quality photocopies or digital copies for research study. Will pay all copying and shipping costs.  
[dansherman@oikosmedia.com](mailto:dansherman@oikosmedia.com).

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WEST VIRGINIA stereoviews, postcards, other photography, and old better paper. I buy on approval, xerox or e-mail scan. Tom Prall, PO Box 2474, Buckhannon, WV 26201, [WVABOOKS@AOL.COM](mailto:WVABOOKS@AOL.COM), (304) 924-6553.

WHITE MOUNTAINS: Early photographic views and stereoviews of new Hampshire White Mountain and northern NH regions, 1850s-1890s wanted for my collection. Town views, main streets, bridges, homes, occupational, coaches, railroads, etc. E-mail images to [dsundman@LittletonCoin.com](mailto:dsundman@LittletonCoin.com), or send photocopies to David Sundman, President, Littleton Coin Company, 1309 Mt. Eustis Rd., Littleton, NH 03561-3735.

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## Filling Big Pages With Historic Depth

(Continued from page 9)

produced by four-lens studio portrait cameras. In many cases, this is the first time these images have been seen in 3-D, especially as anaglyphs so accessible to the general public. In addition, many images are from original glass plate negatives in the Library of Congress collection. The nearly flawless quality of these, especially among the portraits, is enough to give the impression that people in period costume were stereographed sometime last week! Only the limited depth in these shots of people like Grant, Sherman, Wells and Stanton provides evidence that they were photographed with a four-lens portrait camera and not a modern stereo rig. In almost every case, the portraits of other personalities of the time (like that of Mary Lincoln on page 123) are much sharper than those of Lincoln himself, many of which were scanned from vintage prints and enlarged.

One unique image in the book is a conversion, but one done in an attempt to reconstruct what was once almost certainly a full stereoview. The image is that of Lincoln's body in a coffin taken by Jeremiah Gurney, of which only a

half-stereo print survives in the Abraham Lincoln Presidential and Library Museum. Ron Labbe of Studio 3D produced an amazing, detailed 3-D conversion for the book, and the enlarged image fills page 187.

The debate between pair vs. anaglyphic stereograph reproduction won't be settled by this publication, regardless of the quality of the images reproduced. Many of the anaglyphs are 99% perfect with no noticeable ghosting and easily fused images with great depth. As with other efforts like this, some images show ghosting in limited areas which doesn't interfere with an appreciation of the stereograph and its historic importance. A very few (less than 5) others include bold details against a clear sky or have other parts nearly impossible to fuse, with ghosting of right and left elements separated by as much as an inch in the full page enlargements. Slightly hyper vintage stereos with far too much depth from infinity to foreground are a challenge for any viewing method, but especially anaglyphic regardless of printing precautions. (While I don't favor it, I can certainly *imagine* some

future publisher of 3-D material like this actually "converting" troublesome stereos to a more manageable depth profile for anaglyphs.)

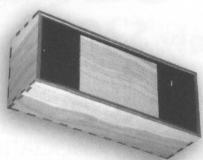
One thing that anaglyphic reproduction does allow is the correction of poorly aligned or density balanced images in vintage stereos, which John Richter as Director of Imaging for the Center for Civil War Photography clearly made happen to the greatest advantage possible here. Among the unexpected bonuses in *Lincoln in 3-D* is a series of 1866 plantation views by South Carolina photographer Erastus Hubbard, providing a dramatic look at the lives of ex-slaves and reproduced in print for the first time.

Those determined to see the original full stereoviews will find many (certainly not all) from *Lincoln in 3-D* back in *The Civil War in Depth* Volumes One and Two, but I'd strongly advise getting the new book as well. It's a major achievement among stereoscopic history publications and a timely reminder from a major publisher of the vital roll of stereography in the documentation of history 150 years ago.

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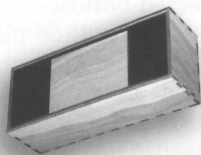


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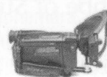


## Berezin Stereo Photography Products



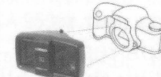
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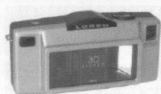
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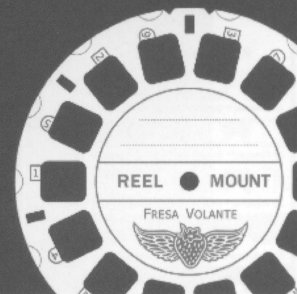
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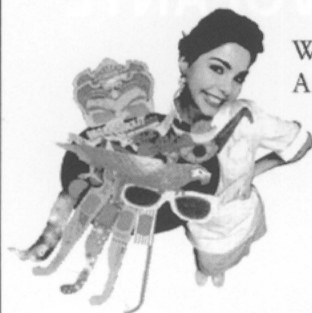
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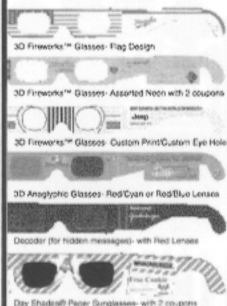
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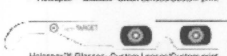
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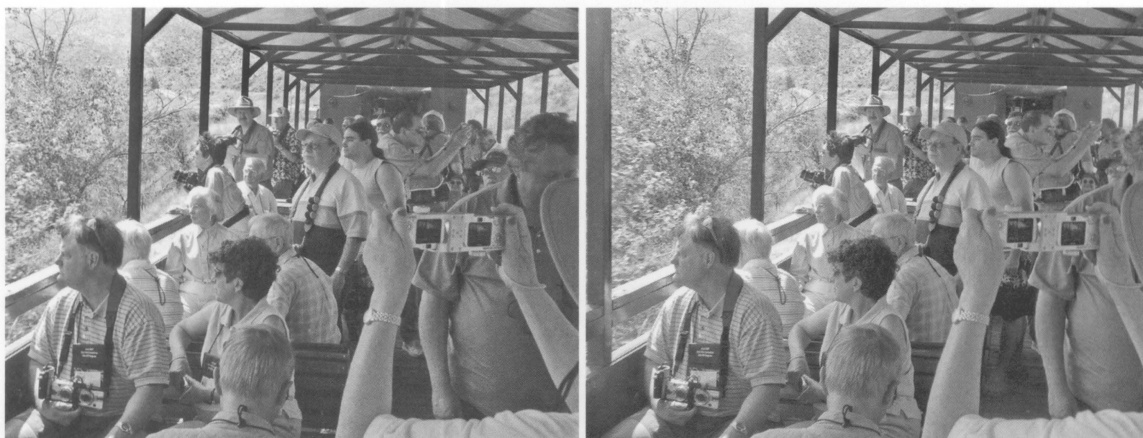
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*One of many excursions during the 2007 NSA/ISU convention in Boise, ID was this ride on the Thunder Mountain Express along the Payette River where other attendees were white water rafting at the same time. Excursions like this are among the most memorable and stereographed events of conventions and your help is needed to organize equally memorable trips for future conventions.*



